“GAMIRIGHT - The right gamification for tackling early school leaving and disadvantage”

"SURVEY TEACHERS/PUPILS - ANALYSIS”

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INTRODUCTION

From November 2021 to July 2022 within the Erasmus+ project nr. 2020-1-ES01-KA201-082223. "Gamiright - The right gamification for tackling early school leaving and disadvantage "have been implemented the pedagogical proposal in accordance with the EDR (Educational Design Research).

In this phase, meanwhile was taking place the piloting phase of the project related to gamification, have been collected data about the progress of the piloting and the success of the applied strategy in schools.

Three primary schools from Spain, Romania and Greece participated in this piloting phase and collected the data:

CENTRO DE EDUCACION INFANTIL Y PRIMARIA CUBA from Spain (Madrid) participated to this phase:

- Questionnaire for teachers: 5 teachers Pre-gamification, 12 teachers after gamification
- Questionnaire for students: 324 students reply.
- School report card analysis: 162-164 students.

SCOALA PROFESIONALA GROPNITA from Romania (Iasi) participated to this phase:

- Questionnaire for teachers: 42 teachers pre gamification, 61 teachers after gamification
- Questionnaire for pupils: 497 students reply.
- School report card analysis: 592 students .

E-SCHOOL from Greece (Karditsa) participated to this phase:
Questionnaire for teachers: 5 teachers pre gamification, 5 teachers after gamification.
Questionnaire for pupils: 56 students reply.
School report card analysis: 56 students.

Questionnaires were administered to teachers and students before and after gamification, meanwhile students' school grades were checked to see if they had passed or failed school subjects. As different periods apply in each country to collect students' report cards, later in the analysis you will find different data collection times for Spain as opposed to Romania and Greece. In any case, for the analysis of the report cards, the data on whether or not the students passed the subjects before the gamification strategy and after the gamification strategy, at the end of the year, were taken as a reference. As for Spain on the other hand, in addition to before and after gamification there is also an intermediate evaluation of the subjects

These questionnaires were provided to:

- See the impact on pupils: Check if their needs were reduced by improving their academic results, improving their social skills and emotional management to improve the coexistence in the centre and also improving their relationship with their family.

- To see the impact on teachers: to monitor the benefits of the gamification strategy from the teachers' point of view in their classes. Also in IO2 an important part was the creation of a manual that tells teachers how to implement this gamification methodology in their classrooms to teach in a learning environment where the student is interested and motivated to learn and follow the established guidelines, thus being able to focus more on the content of the areas than on all those aspects that make teaching difficult such as: organizing discipline, maintaining silence, monitoring tasks, conflict resolution, motivating participation...

- See the impact on management teams (schools) will be to be able to implement this methodology following detailed and complete guidelines on how to do it as well as the necessary confidence to do it because there is evidence of results.

- See the impact on the families will allow a greater collaboration with the centre; to participate in the educational work of the pupil in coordination with the teacher without the teacher investing more time than normal; to be aware of the evolution of their child; and to have resources that allow them to continue the educational work and enjoy the learning that takes place in a healthy and conscious way in the company of their children.

The analysis of the data collected showed that the gamification strategy applied in school was really successfully from teachers' side and students side too. In fact, if on the one hand for the teachers the attention and participation of students within their classes has improved considerably thanks to the gamification strategy, on the other hand for the students the lessons have also become more interesting and active, making them feel more involved not only within the lessons but also within the school complex, improving not only school performance but also relations between young students.

Survey for teachers

Pre-gamification survey was answered by 52 teachers from Spain (5), Greece (5) and Romania (42) before start the “Gamiright” project inside the schools and their classes.

End-of-project questionnaire carried out on a sample of 78 teachers from Spain (12), Greece (5) and Romania (61) who developed the Gamiright project at schools.

For the teachers a form was placed concerning their knowledge of teaching methodologies related to gamification and their knowledge of board games or other game types that can enhance teaching strategies. The form presented to the teachers was administered via a simple Google form where they could freely choose from various options or freely comment on each answer with their thoughts and impressions. The choice of using a Google form was based on the fact that collecting datas from professors through Google form can make this phase faster and easier for the data collection and analysis phase.
The forms were translated into each language of the participating countries to facilitate comprehension even where the teacher did not have a high level of English or sufficient English vocabulary to be able to comment appropriately on the answers.

The feedback for teachers is divided into 20 questions corresponding to 7 macro areas where questions are related based to the topic of the question. the areas are:

1. Identification
2. GAMIFICATION & GAME-BASED LEARNING (GBL)
3. NEW TECHNOLOGIES APPLIED TO GAMIFICATION
4. BOARD GAMES AS A METHODOLOGICAL RESOURCE IN THE CLASSROOM
6. Motivation, Participation & Academic level after gamification process
7. Family Involvement

From the data collected from teachers, it shown that being able to bring gamification and GBL (Game Base Learning) content into the school improved motivation and participation of students in classes, the involvement of families In schools and also increase the knowledge of the teachers, encouraging them to use the learned methodology in their lesson and involving other colleagues from the same school to use this new approach and knowledges inside their lessons.

Comparing the results of the pre-gamification phase and the post-gamification phase shows that the teachers noticed a noticeable change in the students behaviours and attitude.

- The 86% of teachers felt that students' learning motivation during lessons was very good (rated 9 out of 10 by 58% of teachers and 10 out of 10 by 29% of teachers) in contrast to previous ratings where only 12% felt that students were very well motivated to learn (9 out of 10 - 6%, 10 out of 10 - 6%).

According to the teachers who replied to the final questionnaire, the use of board game results very effective to motivate pupils.

- The 79% of the interviewed teachers, that experimented GBL and Gamification in their classes really think that board games help with the pupils' motivation, evaluating the usefulness of boardgames 9 on 10 (53,1%) and 10 on 10 (25,9%). The rest of the teachers interviewed express their opinion evaluating the usefulness of board games for motivation between 7 (2%) and 8 (17,3%). Only the 2% of teachers think that boardgames are helping with the motivation in pupils just 6 on a scale of 10 (just sufficient).
  This data, if compared to the response at the form before apply gamification in school show how the opinion on gamification changed for teacher.
  In fact, before gamification, the evaluation of usefulness of boardgames to motivate students was 9 on 10 only for the 10% of teachers and 10 on 10 for only 2% of them. For the 14% of teachers interviewed, using board games to motivate students was lees then 6 on 10.

As a positive effect of the introduction of the gamification and GBL strategy, a significant increase in class participation by students was noted by teachers. According to the results collected through the form by teachers, using board games as motivating elements for pupils it resulted very efficient and useful, showing a satisfactory result in the participation of students in class.

- The students' participation after gamification was evaluated very good (8,9,10 on 10) from the 93% of teachers, compared to the 15% evaluated before start of gamification by teachers.

The participation of family in school's life and pupil's education was monitored too.

- According to the data collected from the impression and experience of the teachers during the project, the 55% of the family were more involved in the pupils' education after the gamification, in contrast with the 4% before the gamification

% Student's learning motivation.

	PRE – gamification	AFTER - Gamification
Vote	**%**	**%**
1	**3**	**0**
2	**6**	**0**
3	**4**	**0**
4	**12**	**0**
5	**20**	**0**
6	**18**	**1**
7	**15**	**5**
8	**10**	**7**
9	**6**	**58**
10	**6**	**29**

% Usefulness of board games in motivating students.

	PRE – Gamification	AFTER - Gamification
Vote	**%**	**%**
1	**2**	**0**
2	**2**	**0**
3	**0**	**0**
4	**4**	**0**
5	**21**	**0**
6	**11**	**2**
7	**13**	**2**
8	**22**	**17**
9	**22**	**53**
10	**4**	**26**

% Pupils' active Participation in lessons

	PRE - Gamification	AFTER - Gamification
Vote	**%**	**%**
1	**0**	**0**
2	**1**	**0**
3	**0**	**0**
4	**2**	**<1**
5	**9**	**0**
6	**12**	**1**
7	**8**	**5**
8	**9**	**7**
9	**5**	**56**
10	**1**	**30**

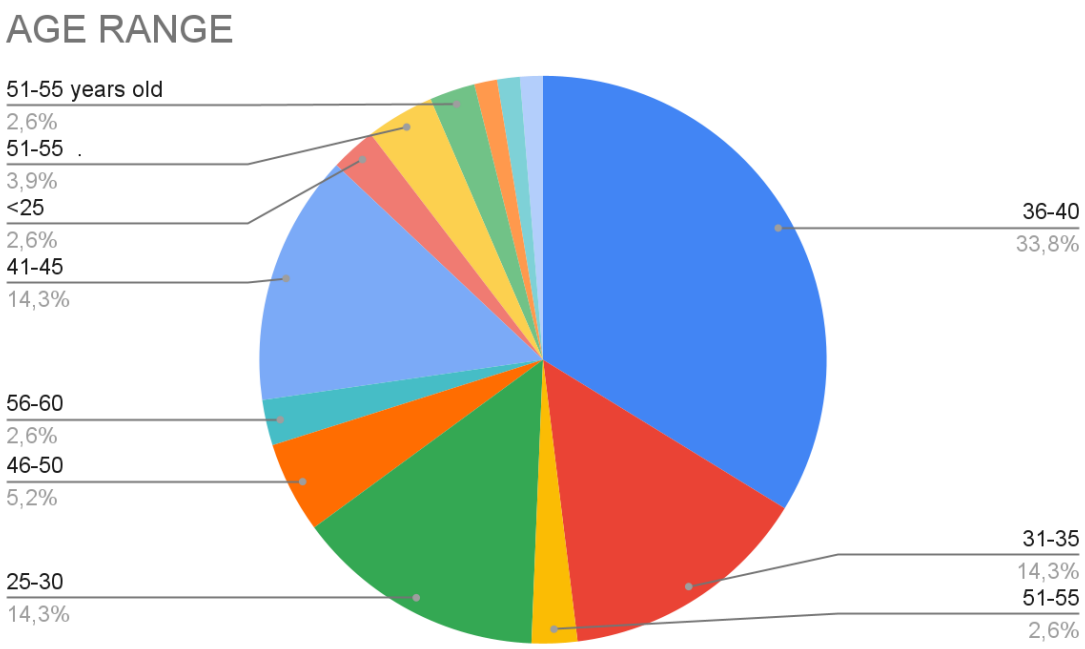
% Family involvement in Pupils' education.

	PRE – gamification	AFTER - Gamification
Vote	**%**	**%**
1	**0**	**0**
2	**3**	**0**
3	**9**	**2**
4	**7**	**3**
5	**7**	**2**
6	**11**	**10**
7	**3**	**7**
8	**2**	**10**
9	**4**	**47**
10	**0**	**18**

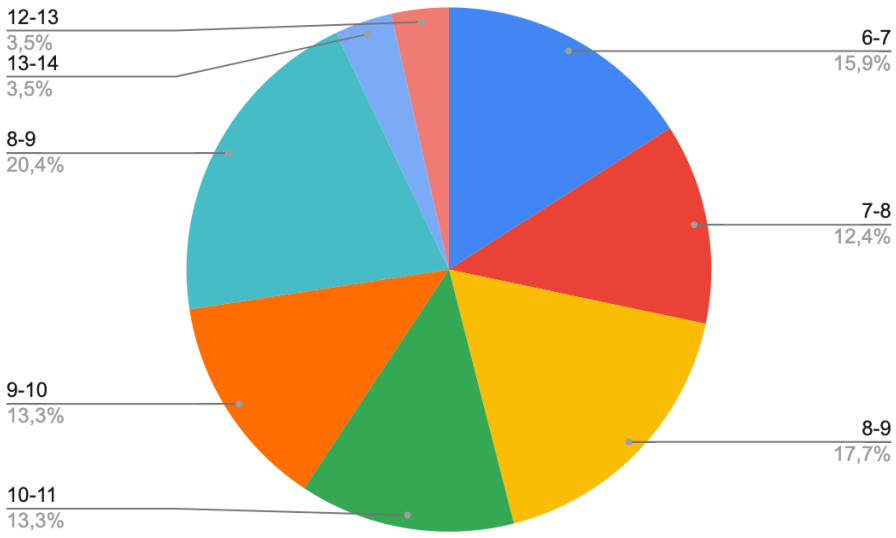
The Form sumministrated with the related answers from teachers is the following one:

1. Identification

What is your age range?



What is the age of the pupils you teach



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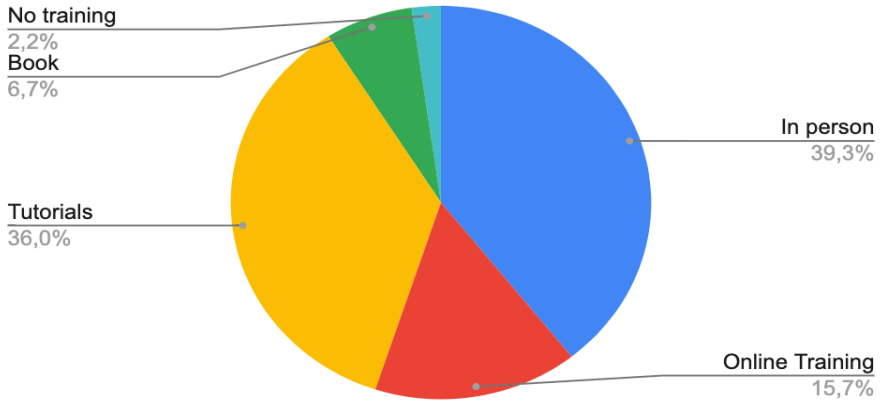
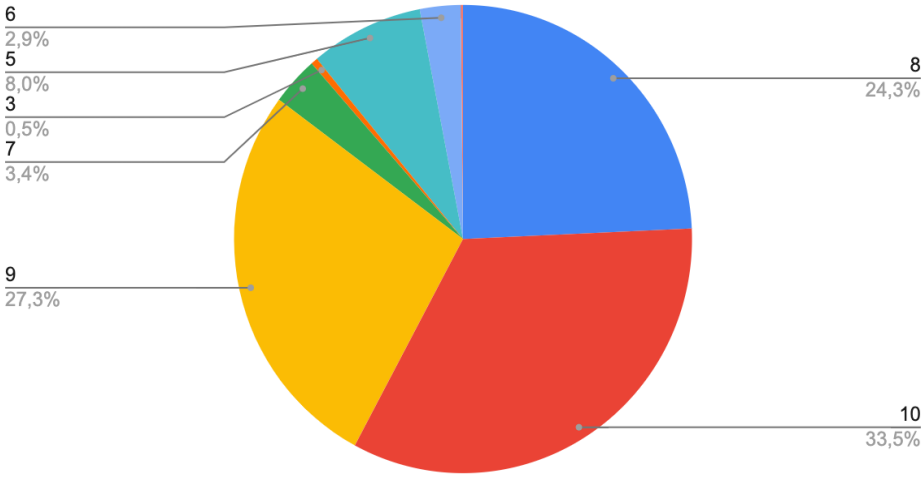
2. GAMIFICATION & GAME-BASED LEARNING (GBL)

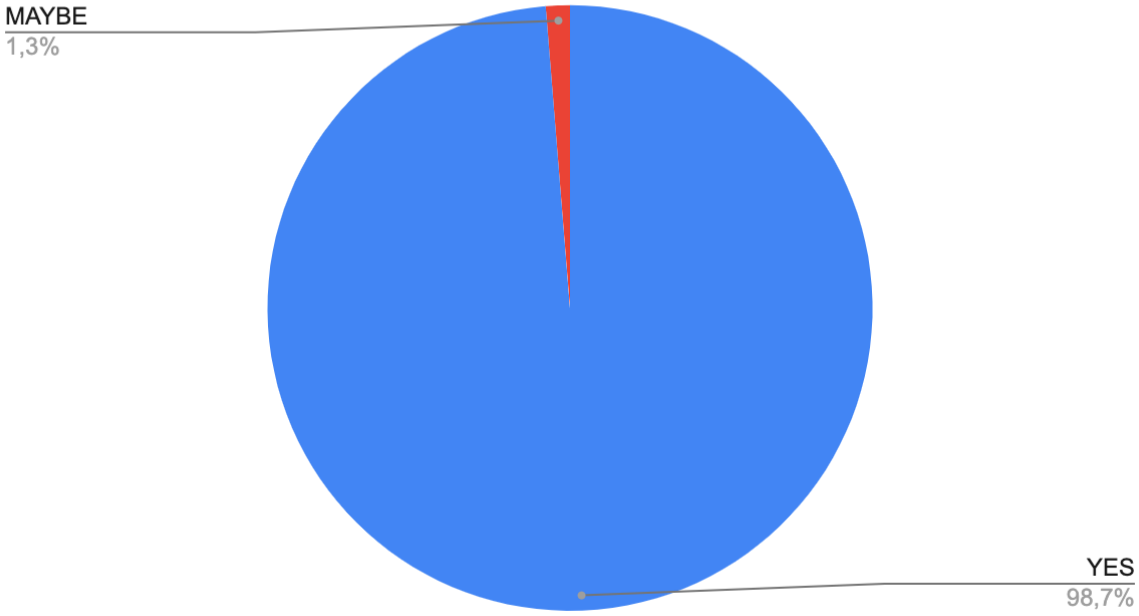
I have attended some training on gamification and GBL.



Quantify your level of knowledge on Gamification and Game-based Learning (GBL)



Would you use gamification in your class

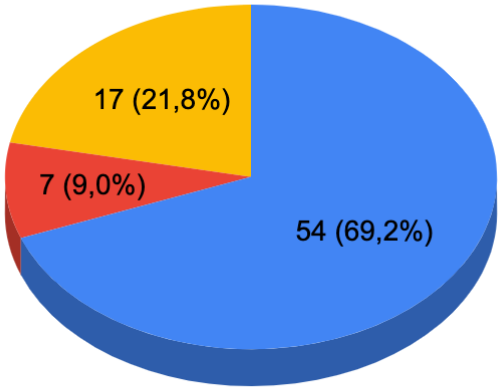


Comments:

Yes, I already use it. It is a very motivating method for students.
Gamification is very useful.
Original
Yes, it would be interactive
Yes, it's super useful.
Yes, I have used and am really excited about this method.
I used gamification during lessons.
Gamification- a modern method.I apply it in class.
It's a method that is to my liking, but also to the students.
I have applied gamification.
The students have become responsible, more aware, more attracted to school.
Pupils are fascinated by everything that means play!
I still have a lot to learn, but, as much as time allows, I enjoy the children with games, points and fun.
Not used yet
Yes, it's useful
It activates and motivates students
It helps a lot with the management of the class of students.
Motivation, fun, competition
A great change during lessons
Novelty in education
A useful, modern, attractive method that children love.
Pupils are more active in class. Being more active helps them learn more effectively.
I use as much as my time allows.
I will use it next year. I've seen differences in the pupils' behaviour
A very good method.
A method the children like.

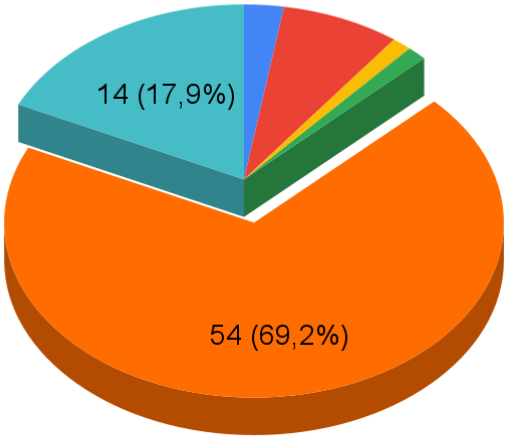
I like gamification a lot.
Yes, I use gamification.
Children like gamification a lot.
I use it every day in my classroom.
I like this method a lot.

I would use gamification in my classes because…



ANSWERS	
It will increase students' motivation toward learing	
It will soomehow incentivise the teacher's motivation toward teaching	
It will enrich the teaching-learning process by encouraging more active participation	

On the other hand, the Gamification process..



Anwser	n° answers	
1 – slow down learning	2	
2 – Entail more work fot teachers	6	
3 – Spending extra time on non-curricular issues	1	
4 – Encourage unhealthy competition among students	1	
5 – add ccompleity to the teaching learning process	54	
6 – None of the above. It will take more work at the beginning, but then the dynamics will facilitate the work	14	

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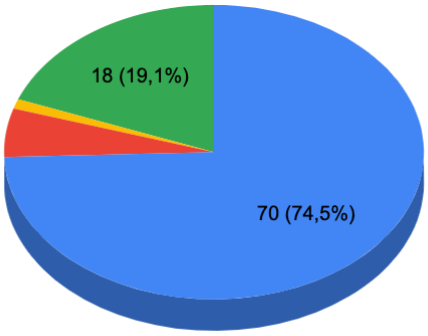
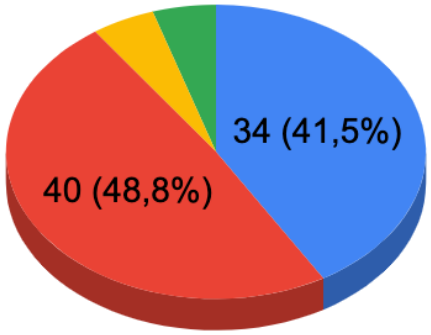
I decided to carry out a gamifed process with my course or courses I teach because …



Answers	N° answers	
1 – gamification is an educational trend that is “here to stay” in any type of educational level	70	
2 – I feel social pressure from my colleagues if I don’t participate in the project	5	
3 – It is a decision of the management team that has been imposed on all levels of the school	1	
4 – the teaching staff firmly believes in the project, which is sufficiently important to differentiate the school	18	

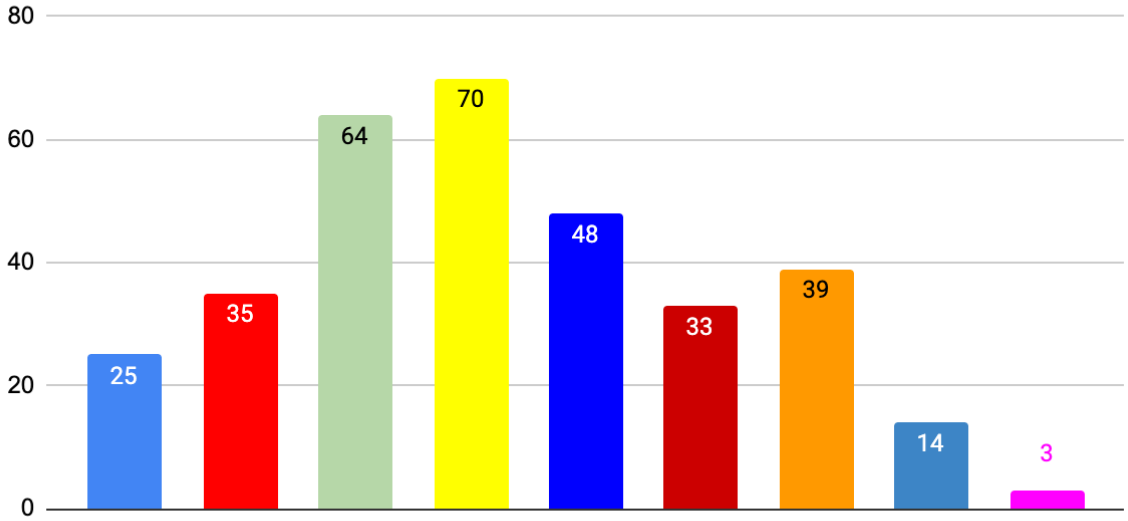
3. NEW TECHNOLOGIES APPLIED TO GAMIFICATION

Have you use ICT applications that help motivate students to learn?



Question	N° answers	%	
1 Educational Apps on mobile devices or interactive monitors	34	41	
2 Platforms with “token economy” System (Classdojo,myclassgame,…)	40	48	
3 Websites with online games	4	4	
4 Editable online resources	4	4	

Please tick the educational resources you are familiar with those listed below



Resource	Column	N. answers	Colors

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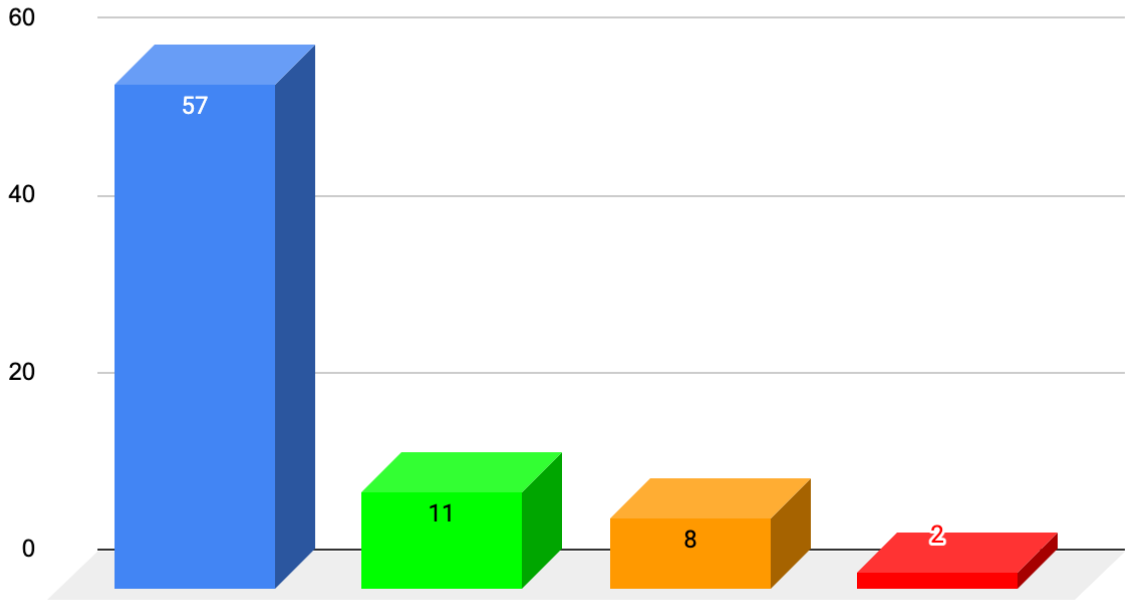
LIVEWORKSHEET	1	25	
PLICKERS	2	35	
QUIZZIZ	3	64	
KAHOOT	4	70	
CLASSCRAFT	5	48	
PADLET	6	33	
MINECRAFT	7	39	
ROBLOX	8	14	
BRAINSCAPE	9	3	

How often do you use ICT in class?



Everyday	57
2-3 per week	11
1 per week	8
I don't usually use ICT in class.	0
I don't have the needed resources to use ICT in class.	2

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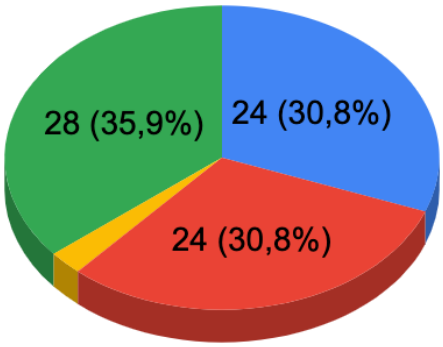
3. BOARD GAMES AS A METHODOLOGICAL RESOURCE IN THE CLASSROOM

Would you use board games in your classes?



Occasionally, especially to reward students who are quicker at their work.	24	
In moments of relaxation of the syllabus or final parts of certain classes.	24	
I will only use games with a clear educational component for instrumental subjects.	2	
I will adapt existing games for use with the class group.	28	
It is not a methodology I will use in my classes.	0	

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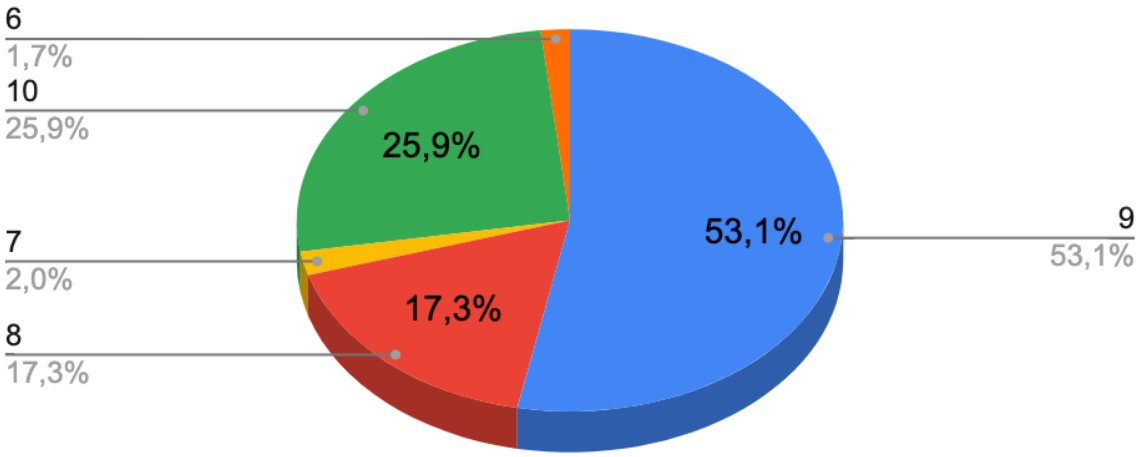
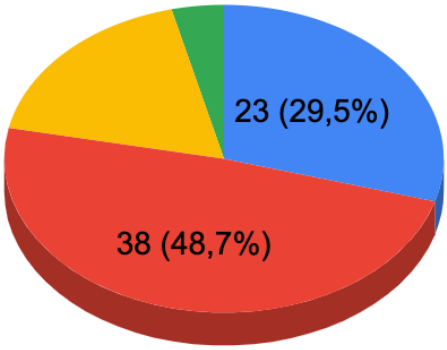
Value the usefullness of board games as a motivating element for pupil



The use of board game results very effective to motivate pupils. The 75% of the interviewed teachers, that experiment GBL and Gamification in their classes really think that board games help with the pupils' motivation, evaluating the usefulness of boardgames 9 on 10 (53,1%) and 10 on 10 (25,9%).
The rest of the teachers interviewed express their opinion evaluating the usefulness of board games for motivation between 7 (2%) and 8 (17,3%). Only the 2% of teachers think that boardgames are helping with the motivation in pupils just 6 on a scale of 10 (just sufficient).
According to the results collected through the form by teachers, using board games as motivating elements for pupils it resulted very efficient and useful, showing a satisfactory result.

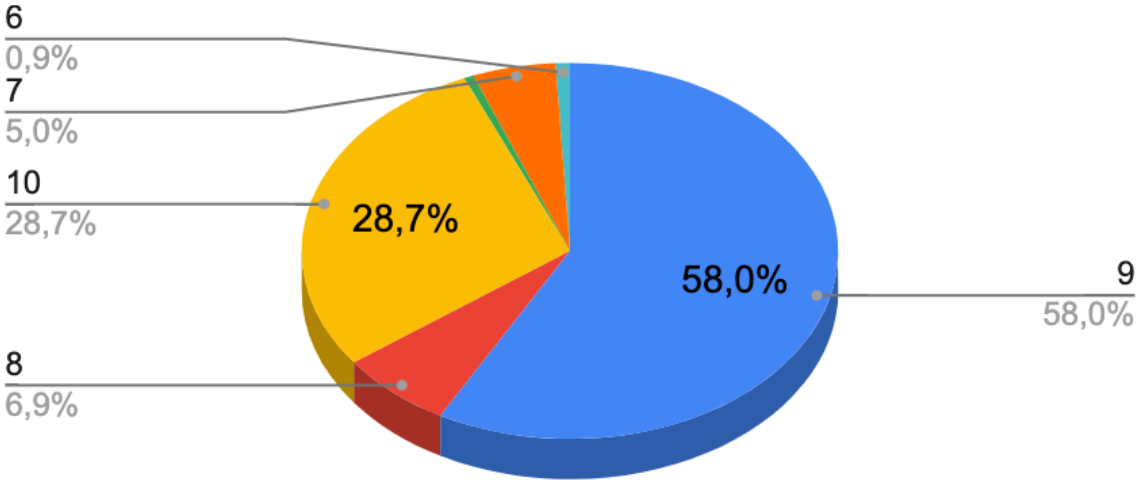
Do you know any modern board games?



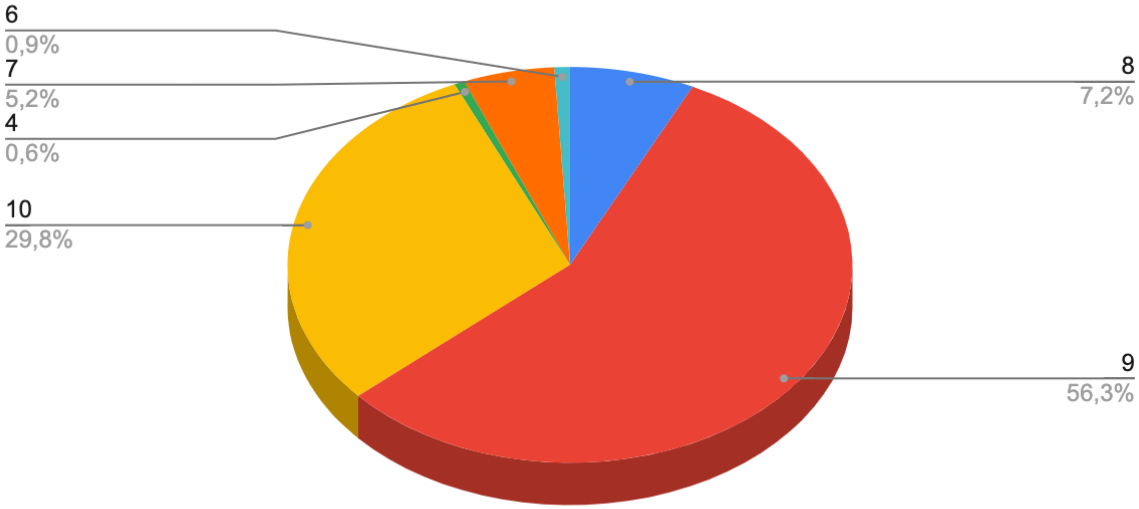
Only the classics: Parcheesi, Dominoes, Monopoly, Goose, Spanish card games.	23
In addition to the above, I know some board games such as Settlers of Catan, Carcassone, Virus, etc.	38
I know a wide variety of modern board games, as well as some of the main mechanics.	14
I am interested in modern board games at a family level and I read reviews, follow specialised Youtube channels, blogs, podcasts, etc.	3
I don't know any board games	0

6. Motivation, Participation & Academic level after gamification process

How would you rate your pupils motivation to learn?



How would you rate your pupils active participation in the lessons?

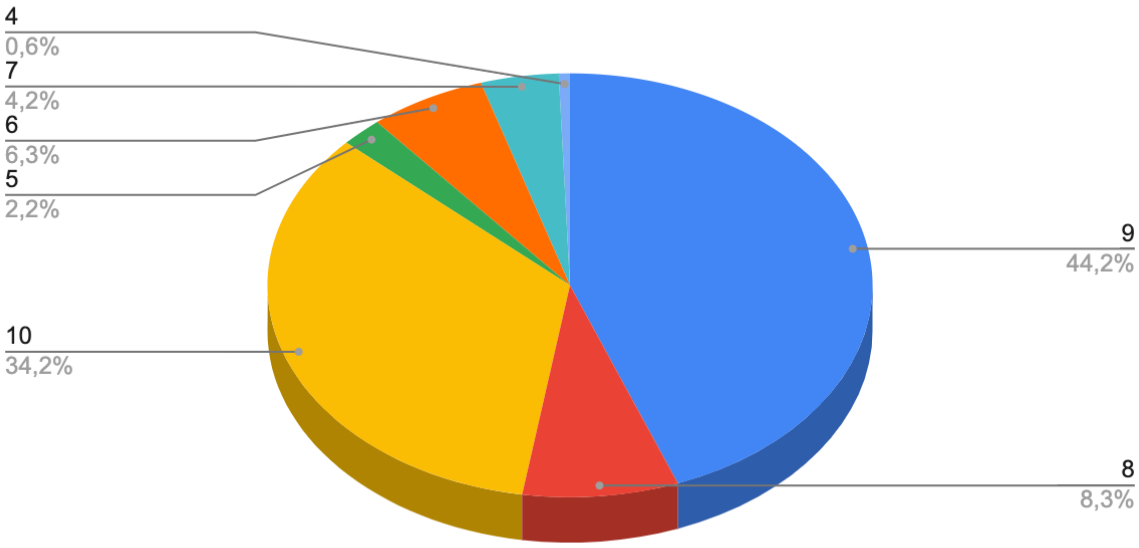


COMMENTS:

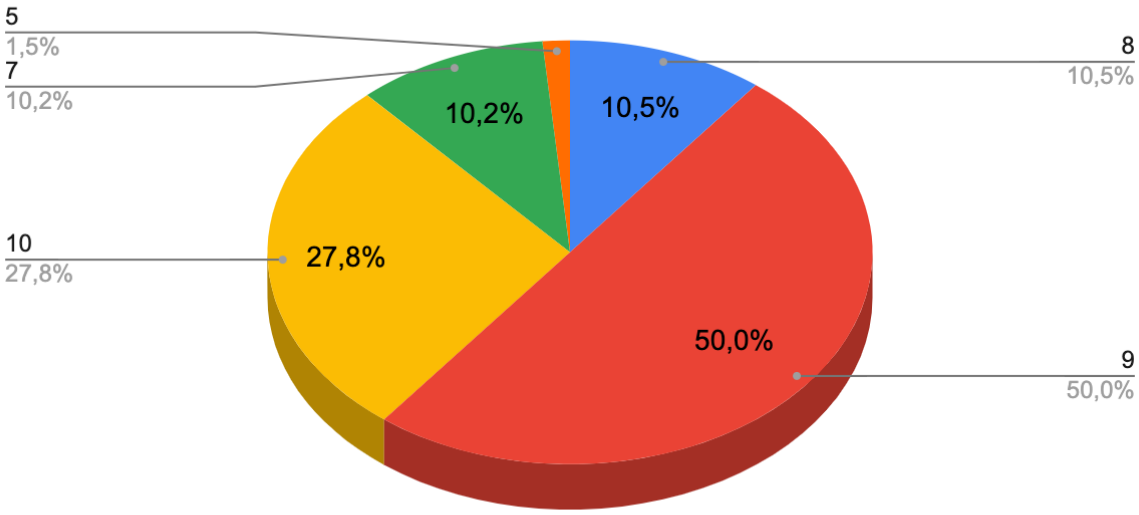
Exceptional
It's a good one, but could be improved.
Students basically enter a competition eager to assert themselves.
Quite disinterested
Gamification has improved motivation.
There are some students who, due to shyness or lack of knowledge, find it difficult to participate.
Some students get really hooked on gamification and others not so much.
When I use the games, they are much more motivated.

There are exceptions of two specific students who refuse to participate.
They have responded very well to everything I have asked them to do.
Using gamification in the educational process helped to increase the students' interest in participating in the learning process.
We can achieve excellent outcomes by making students believe they are playing because it boosts students' motivation to learn, their want to explore, their curiosity, and their inner satisfaction.
Gamification enriches the teaching-learning process by encouraging more active student participation.
Teachers should discover ways to engage their students and improve their drive to learn because school is a mandatory institution. One of these ways is gamification.
Today's teacher is expected to adopt acceptable teaching methods to stimulate pupils' interest, which is, admittedly, declining.

How would you rate pupils interest in the curricula?



How would you rate your pupils academic performance?

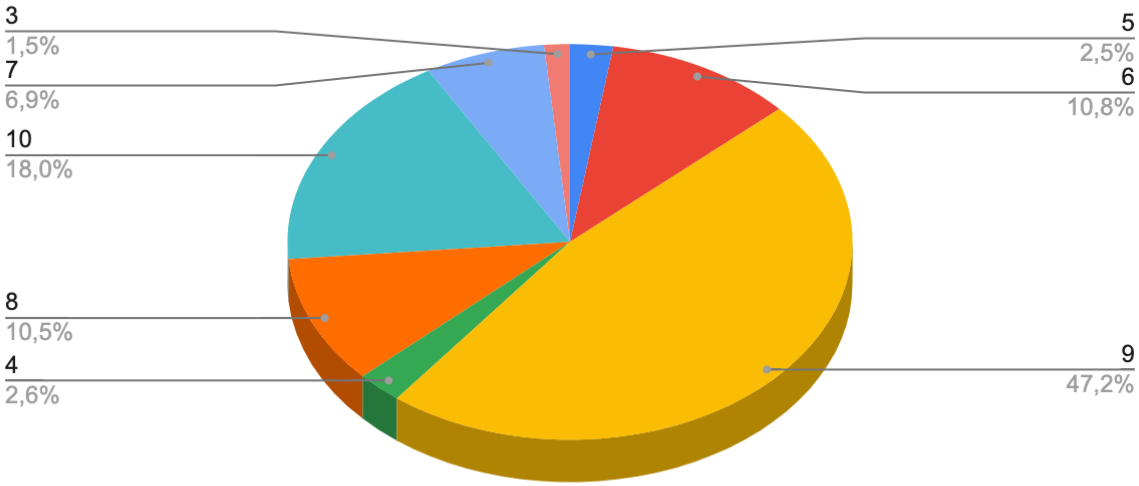


COMMENTS:

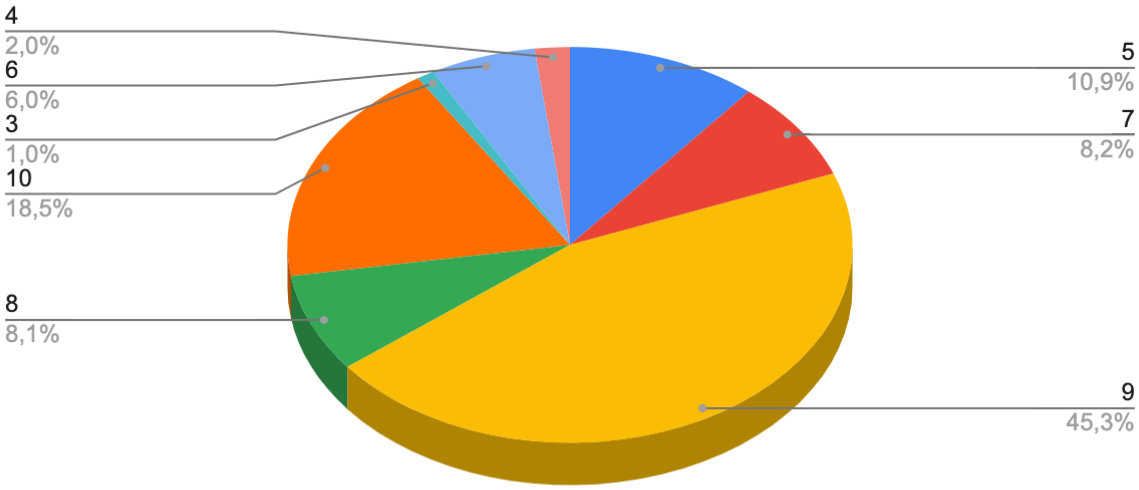
Gamified learning increased students' performance.
Gamified learning helped to increase students' academic achievement.
Gamified learning enriches the teaching-learning process by encouraging more active student participation. As a result, we achieve higher learning results.
Certainly gamification had a significant effect on both increasing students' interest and their performance.
Today's students should be prepared to live and work in a society with increased knowledge and skills requirements. It is therefore important to improve student performance.
The socio-economic and cultural characteristics of the students make their profile difficult at times.
Those who have joined late have found it difficult to adapt.
Pupils' interest is related both to the content itself and to the methodology. Pupils who are not attracted to certain content can be motivated through an appropriate methodology.
It is difficult because they are children with a lot of emotional problems.
We have achieved the objectives.
Very good
This aspect still needs work.
By giving correct answers.

7. Family Involvement

Rate the involvement of the families regarding their children's studies



Rate the involvment of families with regard to other extraordinary educational activities



Comments:

Good luck!
Needs more involvement.
Parents don't always work with the school.
Not involved
Families are generally very little involved with pupils.
I suppose that lack of time prevents them in many cases from getting more involved. Their timetables are sometimes impossible to reconcile family life.

In the centre where I teach, family involvement is low.
It is interesting and I think it will be very necessary in the future.
Parents are less involved in their children's learning, so the role of the school is more difficult and more demanding.
Parents' involvement appears to be regulated more by the student's learning demands than by any other factor. In fact, the latter appears to rise sharply when feedback on the child's school performance is bad and fall sharply when it is positive.

Conclusions for teachers:

Data collected before and after the piloting of the project showed a general increase in teachers' interest in applying gamification methodologies within their activities.

The questionnaire shows that the average age of the teachers who participated in the “Gamiright” project is mostly between 36 and 40 years old (33%), followed by the age group 31-35 (14.5%) highlighted a relatively young group of teachers.
After the piloting phase of Gamiright’s project, the vast majority of them feel they have achieved a good level of knowledge regarding gamification and GBL (game-based learning) on a scale of 1 (minimal knowledge) to 10 (excellent knowledge): 33% feel they have a knowledge of 10, 27% a knowledge of 9, 24% a knowledge of 8 and the remaining 17.5% a knowledge from 3 to 7, with only 0.5% considering their knowledge to be 3 out of 10.

In the Pre-gamification survey the results showed that no one had a knowledge of 10/10 about the topic, only 6% a knowledge of 9/10, 17% knowledge of 8/10 and the 48,93% thought to have “not sufficient” knowledge (marks between 1 to 5).

The knowledge of Gamification for professors, also represented their past experience with gamifications inside the classes. Who didn’t mark a high vote was also showing a lack of practical experience in Gamification practice.
In the final survey, when asked if they would use gamification in their classrooms in the future, 98.7 % said yes, highlighting how the methodology can bring more dynamics into lessons and how students feel more absorbed in the classes and more participative. On the other hand, however, although gamification is an innovative and highly successful methodology during lessons, it is also pointed out by teachers that it is a process that: add complexity to the teaching learning process (69,2%), entail more work for teacher (17,9%) and will take more time at the beginning but after will facilitate the process of teaching.
One of the most significant data from the questionnaires conducted before and after gamification is how the students' participation and interest is perceived. Whereas previously only 57% of the students were considered sufficiently participative and

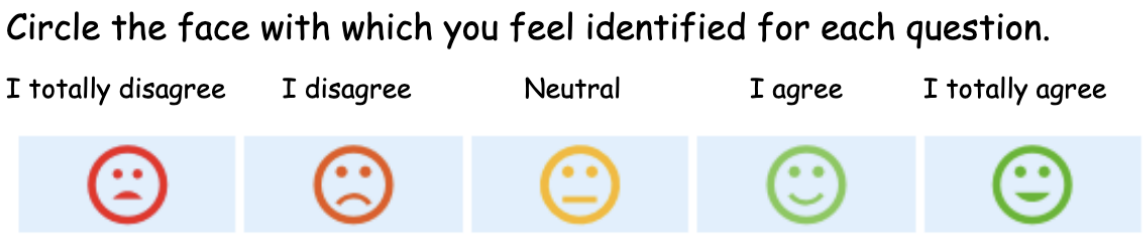
interested in the lessons, after the activities carried out with Gamiright 97% of the students is considered sufficiently participative by the teachers.
According to professors the performances and interest for students in classes increased thanks to the project.
The questionnaire showed also how often teachers use ICT in their classes.
73% of them say they use them daily during lessons, 14% only 2 or 3 times per week. The remaining percentage feels that they do not use ICT during their lessons.
Among the use of ICT the platforms most used by teachers to make their lessons more interesting for the students are "Liveworksheet", "Plickers", “Quizziz” and “Kahoot”.
An important aspect that has been noticed during the gamification piloting is that pupils that entered in the class after the beginning of the piloting meet some difficulties to understand how the gamification system was working.

Survey for pupils:

The final Questionnaire for pupils was conducted to a total of 877 pupils:
In Spain: The survey was conducted to local primary school to 324 pupils,
In Romania: the survey was conducted to 497 pupils.
In Greece: The survey was conducted in a local primary school, where pupils got the chance to try the project's materials in the classroom. A total of 56 pupils were questioned.

For the students, a form was administered concerning their willingness to learn and questions relating to the introduction of gamification concepts during their school day.

In order to make the questionnaire more accessible to them, considering their young age, a rating system with 5 'emotes' was included, in which each emote represented a different type of liking: "I totally disagree", "I disagree", "Neutral", "I agree" and "I totally agree" were the rating scale choices given to them and for each of them there was a corresponding Emote represented as follows



To express their satisfaction, it would have been sufficient to simply circle or highlight the Emote that most represented their thoughts on the question posed.

All questionnaires were translated into the language of each country participating in the pilot phase and then printed out and administered to classes with the instruction that they be completed at school and with the possible assistance of a teacher in case the questions were unclear or unclear enough.

The questions provided to the students are the following:

1. I am motivated to learn new content in class.
2. I am motivated by the use of new technologies in class (computer, interactive monitor, tablets, etc.).
3. The lessons are monotonous and boring.
4. The teacher pays attention to other pupils instead of to me.
5. I get easily distracted thinking about my own things.
6. I study and complete my homework in the shortest possible time, even if it sometimes contains mistakes.
7. I am more motivated in lessons when the teacher uses some kind of point system with us
8. My family helps me with my homework and studies.
9. Circle the number of children in your class with whom you never feel like playing.

10. My classmates often play with each other and I am not chosen in their teams. I spend a lot of time alone in the playground.

According to the data collected students showed that after gamification they were more interested in classes and motivated to study thanks to GBL, gamification and use of new technology in class.

- Comparing the data before and after gamification, if before only the 39% of student felt strongly motivated to learn new content in class, after the gamification, the 52% feel more motivated.
- The 85% of the students, after gamification in the form recognized that using games in classes help them to be more motivated, in total contrast with the though before gamification where only 70% were thinking that use games in cclasses could be beneficial for their motivation.

During the development of the project also family get more involved in the school's life and helping kids also with homework at home, showing :

- An increasing variation of 14% between before and after.

Another aspect that get influenced by gamification procees in students school life have been social relations. In fact, social relations between them get better, reducing exclusions between them:

If before only the 74% of the pupils were disagree with the sentence "My classmates often play with each other, and I am not chosen in their teams. I spend a lot of time alone in the playground." In the final survey the 80% was disagree with the sentence, showing more inclusions between them.

1. % Students Motivated to learn new content in class

	Pre - Gamification	After - Gamification
Vote	**%**	**%**
1 – I totally disagree	**3**	**2**
2 – I disagree	**2**	**3**
3 - Neutral	**8**	**3**
4 – I agree	**48**	**44**
5 – I totally agree	**39**	**52**

7. % Students more motivated to study and learn when the teachers use some games with them

	Pre - Gamification	After - Gamification
Vote	**%**	**%**
1 – I totally disagree	**13**	**1**
2 – I disagree	**11**	**1**
3 - Neutral	**6**	**13**
4 – I agree	**55**	**32**
5 – I totally agree	**15**	**53**

8. % Families help with homework and studies

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	Pre - Gamification	After - Gamification
Vote	**%**	**%**
1 – I totally disagree	**40**	**40**
2 – I disagree	**18**	**8**
3 - Neutral	**22**	**18**
4 – I agree	**6**	**18**
5 – I totally agree	**14**	**16**

10. % Students spending time alone in the playground

	Pre - Gamification	After - Gamification
Vote	**%**	**%**
1 – I totally disagree	**50**	**57**
2 – I disagree	**24**	**23**
3 - Neutral	**19**	**14**
4 – I agree	**4**	**3**
5 – I totally agree	**3**	**3**

This counter-intuitive table shows that gamification also brought about improvements in the personal relationships of young students. after gamification, the percentage of students disagreeing with the sentence increased, indicating the positive impact achieved

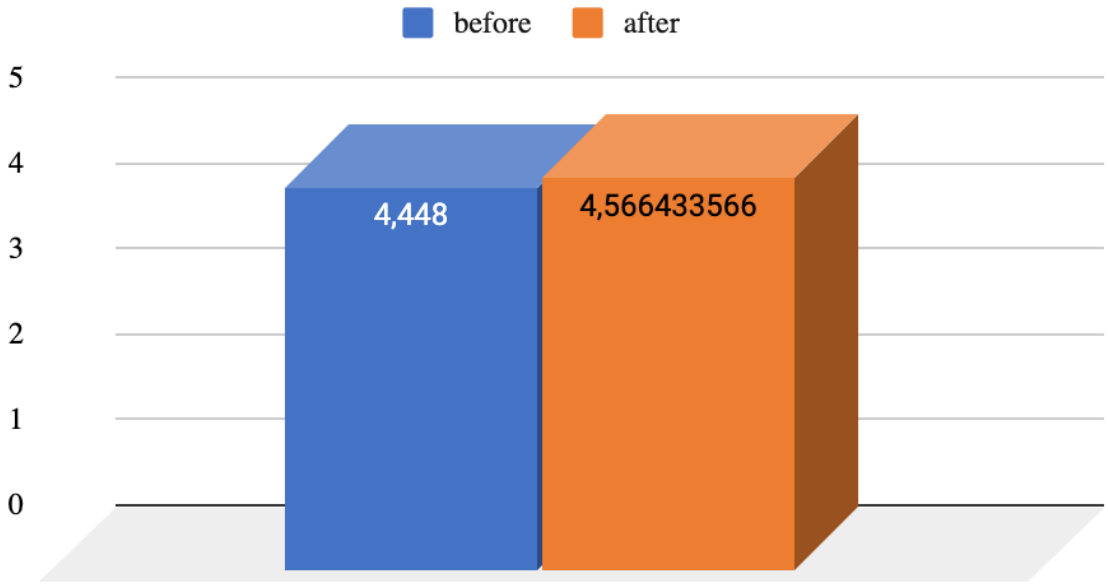
After there will be an analysis by country related to the pupils' answers analysis

Spain

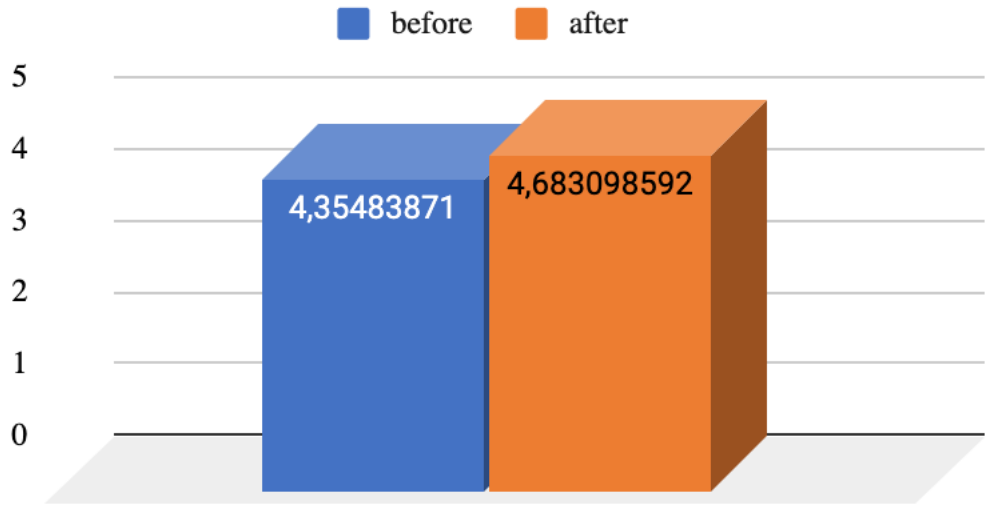
In the answer of Spanish Pupils:
Some notes on this questionnaire: this way of collecting data for small children appears to be fundamentally flawed, due to lack of honesty and comprehension of the questions, and possible answers and simultaneous existence of many distractions(colors, faces in evaluation, other children around), especially for the younger ages 6-8 years old. In this particular case, around 5 children didn't understand the 3rd question as they had written below 'no lo entendí'. Additionally in many cases (50+) children encircled more than one answers simultaneously so we agreed to put the average (no decimals) or the highest one. When a question wasn't answered we put '3' but it is not the case for all of the '3's in this study (around 15 times). Our recommendation for a next study like this concerning feedback from children would be tighter supervision on the answered questionnaires (that all questions are answered by the child) with the minimal amount of distractions around (other children, difficult to understand way of evaluation, colours) and that it should be done in a time frame that is also not distracting (recess, after school etc) so that the children are primarily thinking on the questions in front of them. Also we find it

very important that the significance of the questionnaire and the questions are explained in a very thorough and clear way so that children put effort into being honest (not that they are doing it on purpose now, but more so to pay attention).
For this reason to analyze data from Spanish Pupils we decided to associate a value number per each face they were selecting, from 1 (I totally disagree – sad red face) to 5 (I totally agree – happy green face) and to compare the data collected, we calculate the average of the data answered before and after gamification.
The following results are showed in two column: “Before” that stands for the calculated average of reply before apply gamification process and “After” That stands for the calculated average of response analyzed after the gamification process.

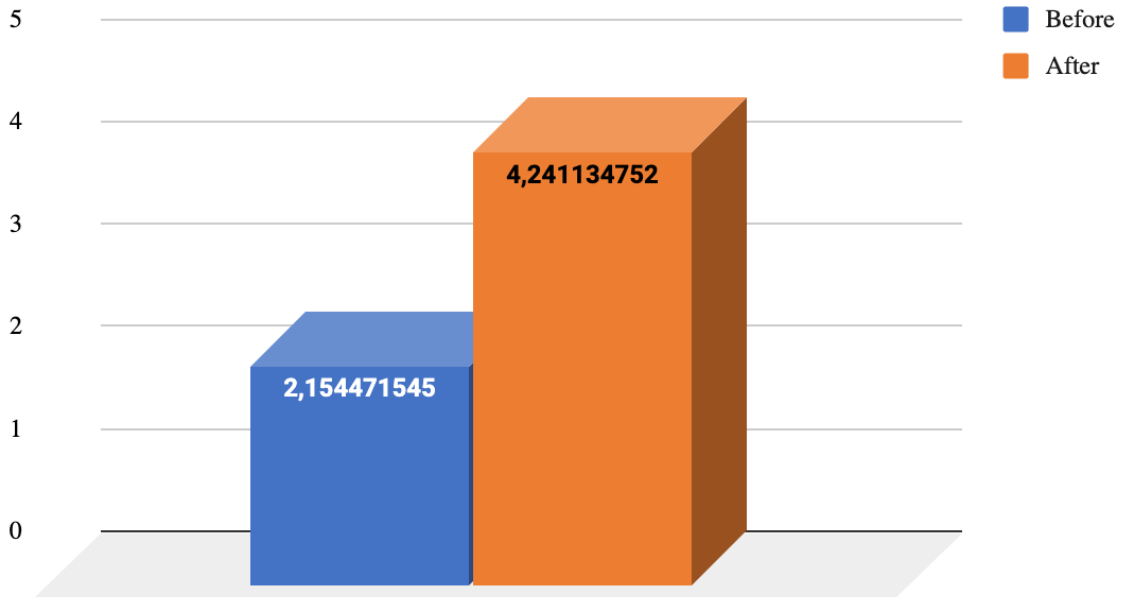
1. I am motivated to learn new content in class.



2. I am motivated by the use of new technologies in class (computer, interactive monitor, tablets, etc.).

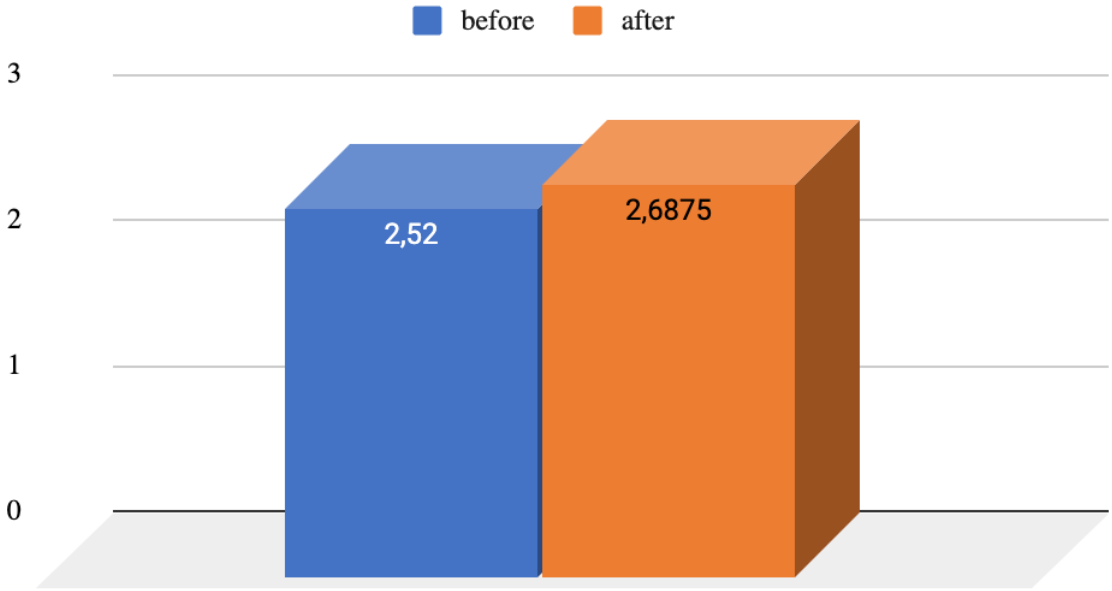


3. The lessons are monotonous and boring.

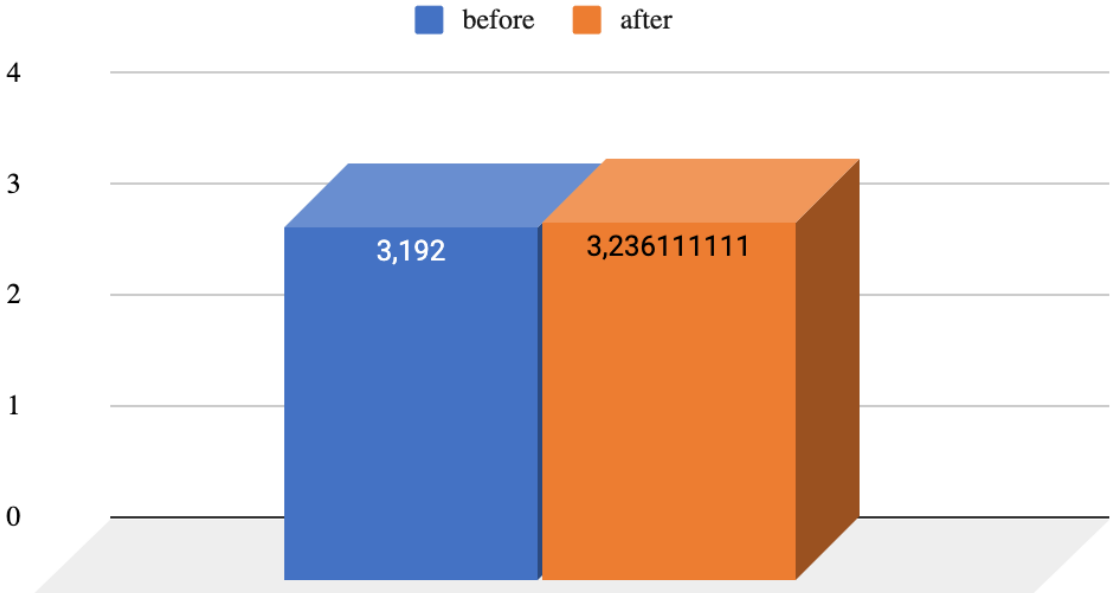


(In this case, answering 1 meant that lessons were monotonous and boring, and 5 that they weren't boring and monotonous)

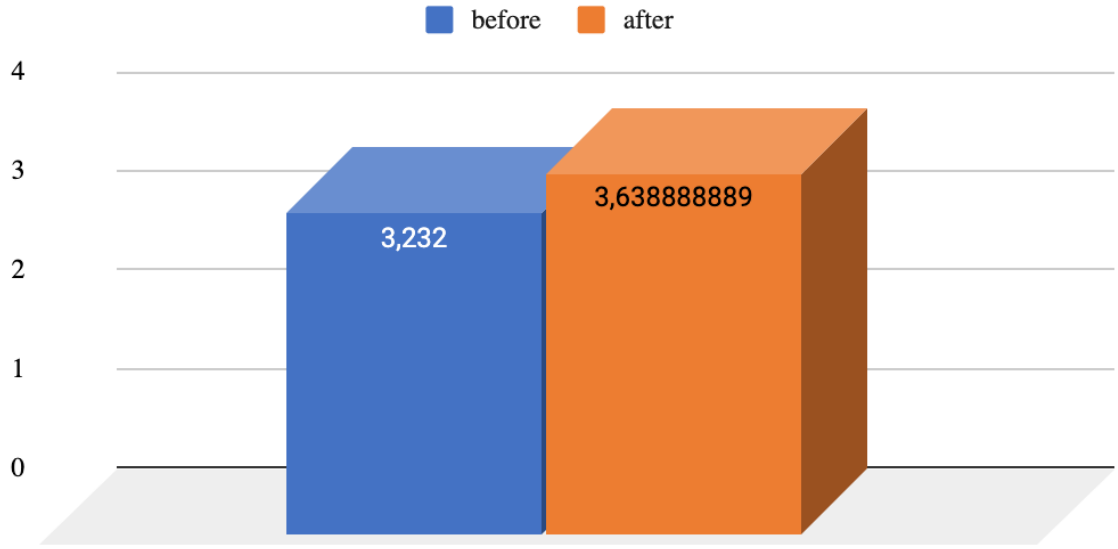
4. The teacher pays attention to other pupils instead of to me.



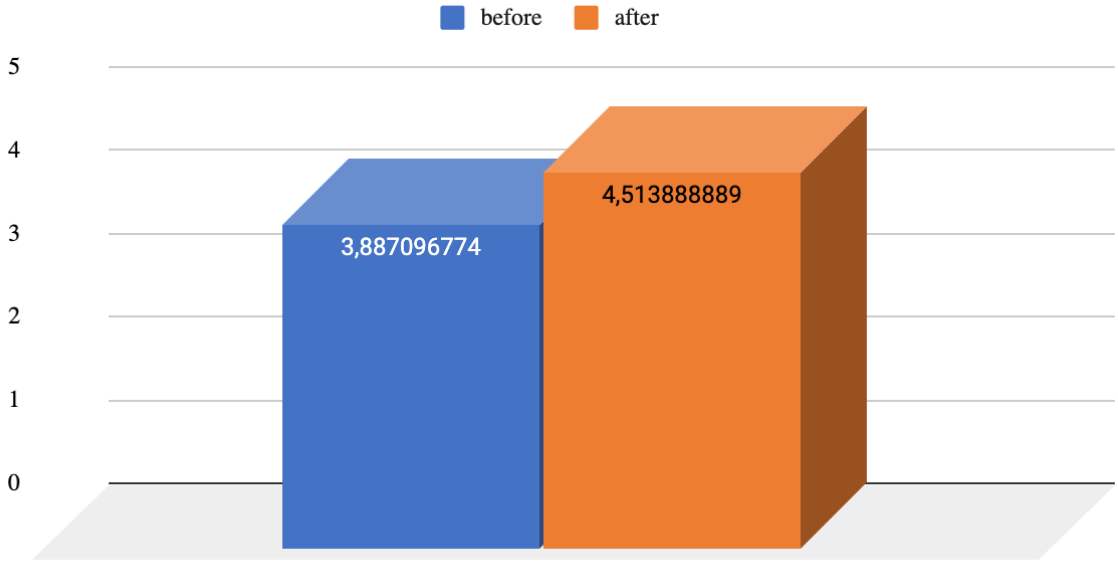
5. I get easily distracted thinking about my own things.



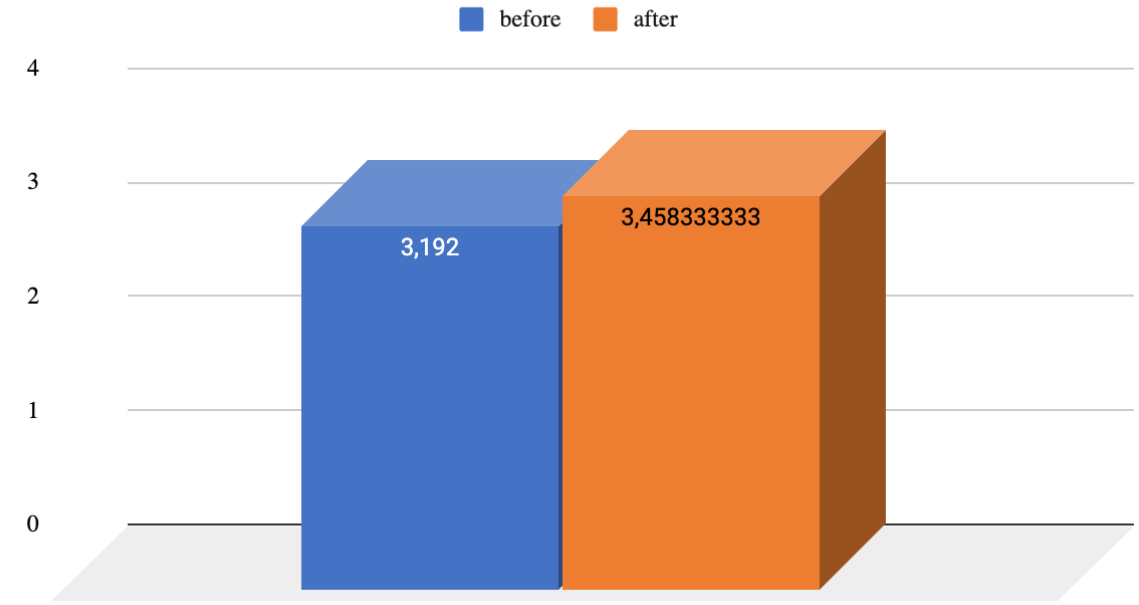
6. I study and complete my homework in the shortest possible time, even if it sometimes contains mistakes.



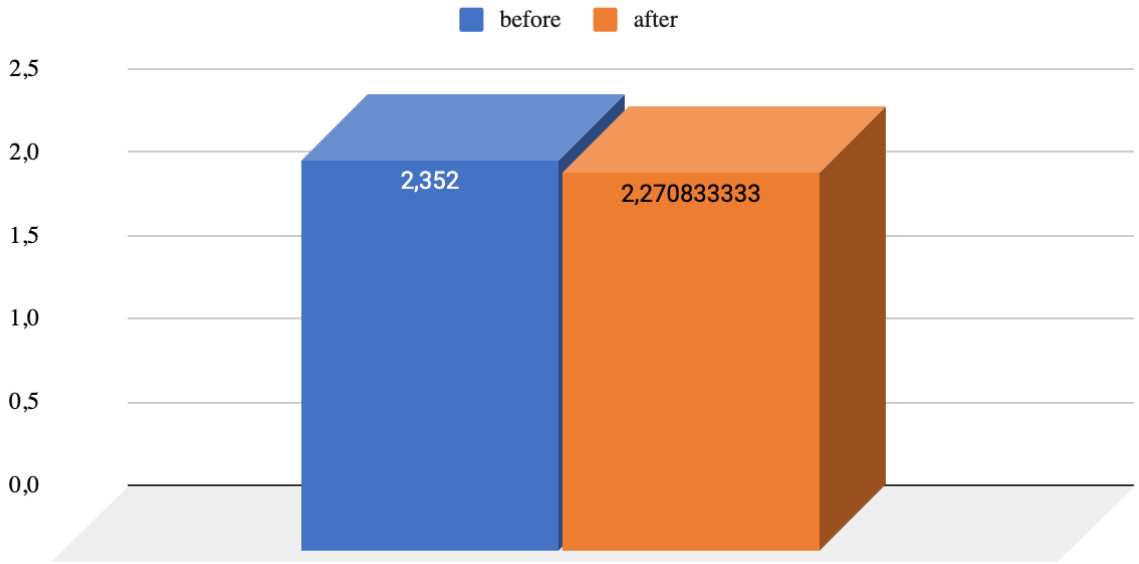
7. I am more motivated in lessons when the teacher uses some kind of point system with us



8. My family helps me with my homework and studies.



9. Circle the number of children in your class with whom you never feel like playing.



The data show the positive impact that the gamification strategy had on the young students. Their motivation, attention and interests in classes increased after gamification showing how beneficial was the strategy for them. On of the most interesting question that show this fact is: “I am more motivated to study and learn when teachers use games with us”. Before the gamification also students thought that use games wouldn’t improve their motivation to learn (average of 3,88 on 5) but after ttried the gamification strategy with GBL elements their opinion changed evaluating the use of games to motivate them in study 4,51 on 5.

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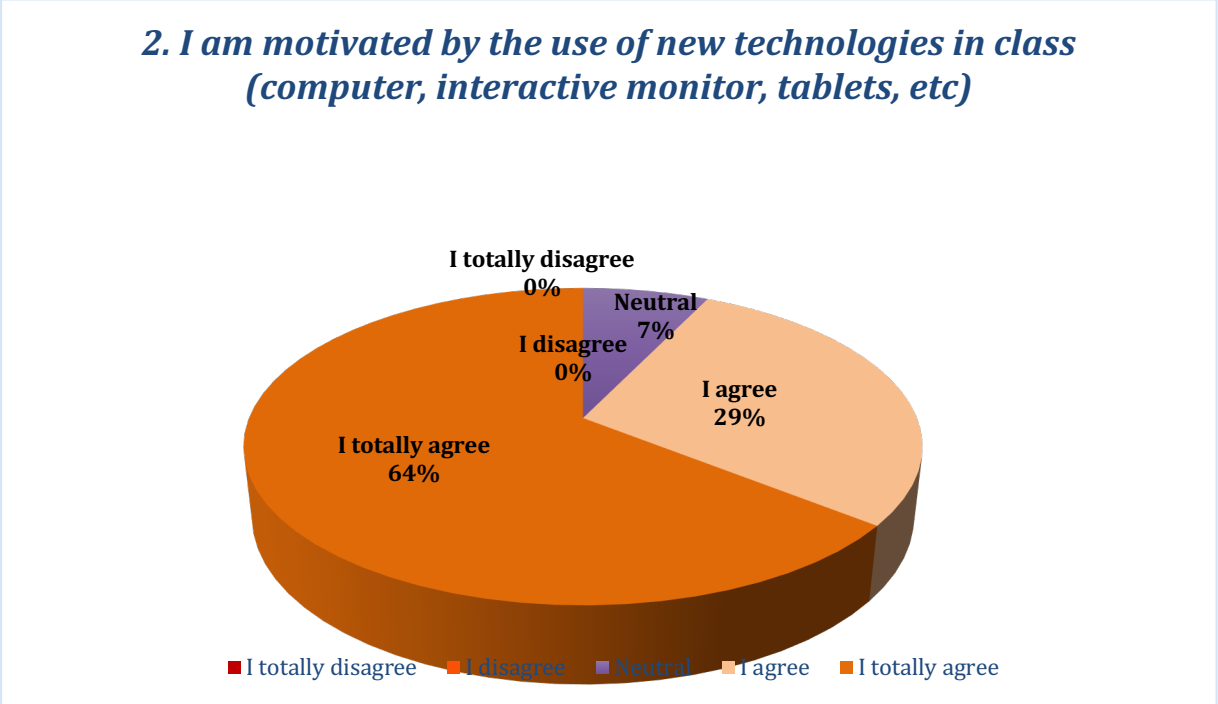
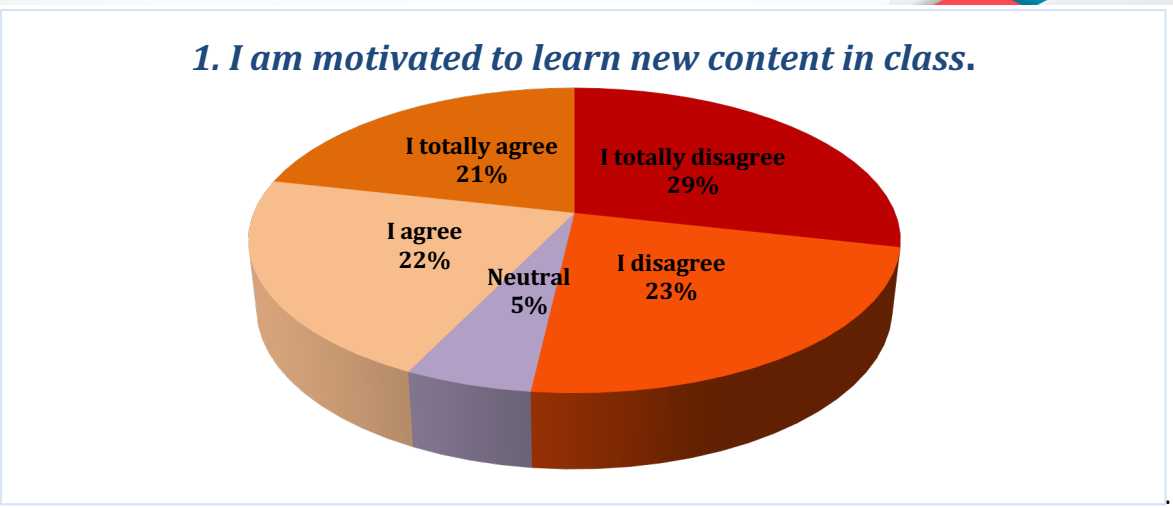
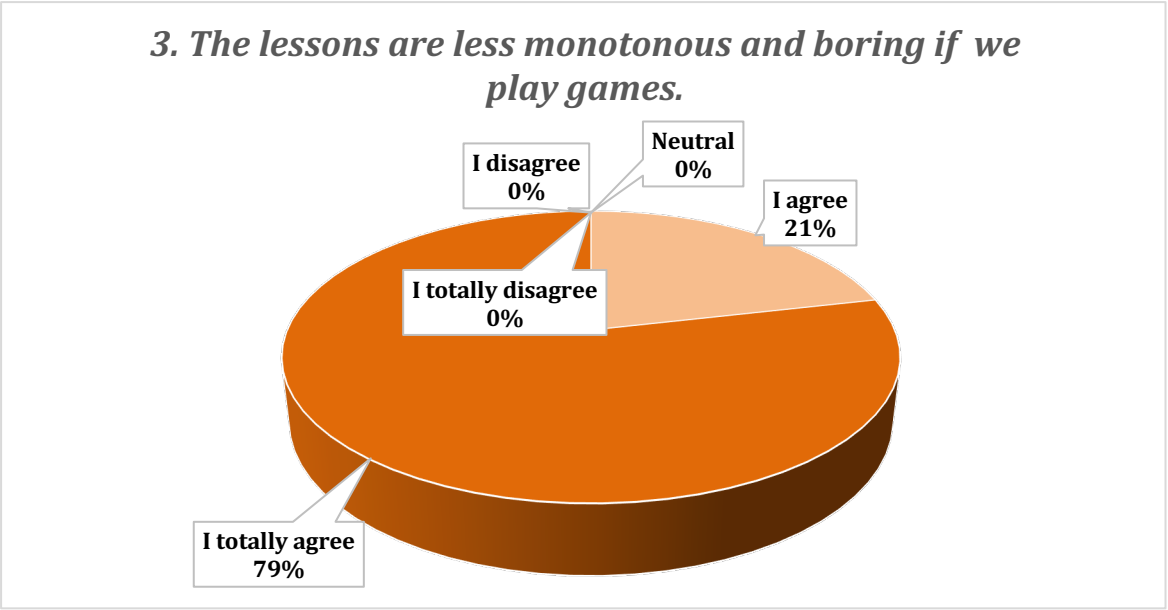
According to the data collected the students get positively affected by the strategy also on other aspects school related, as, for example, with social aspect inside the school with other students and also more interest from families in school's life.

Greece

In Greece, For the students survey, it was difficult to ask the pupils to complete the surveys because they had sporting activities and yard games on the closing days of school. The students' response showed that they highly appreciated the use of the gamification strategy in the classroom and considered that it motivates them to a greater extent when the teacher uses a point system as part of the learning process. A great majority of them (50 out of a total of 56 students) agreed that the lesson was monotonous and an overwhelming majority answered that they are motivated by the use of the gamification strategy in class (56 out of 56 students)

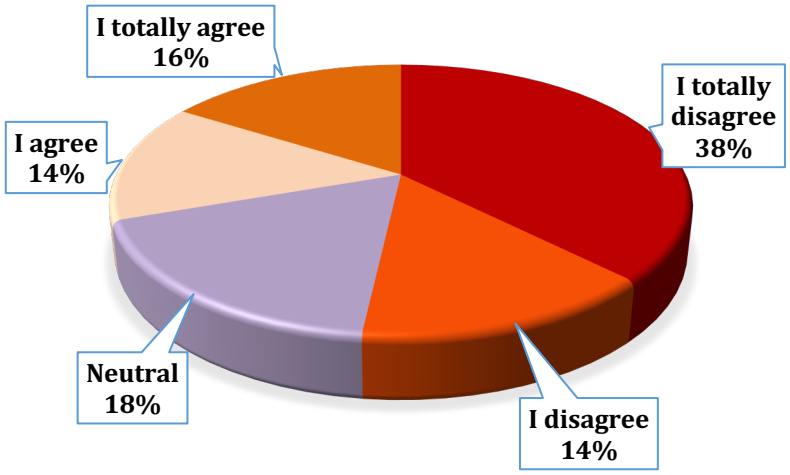




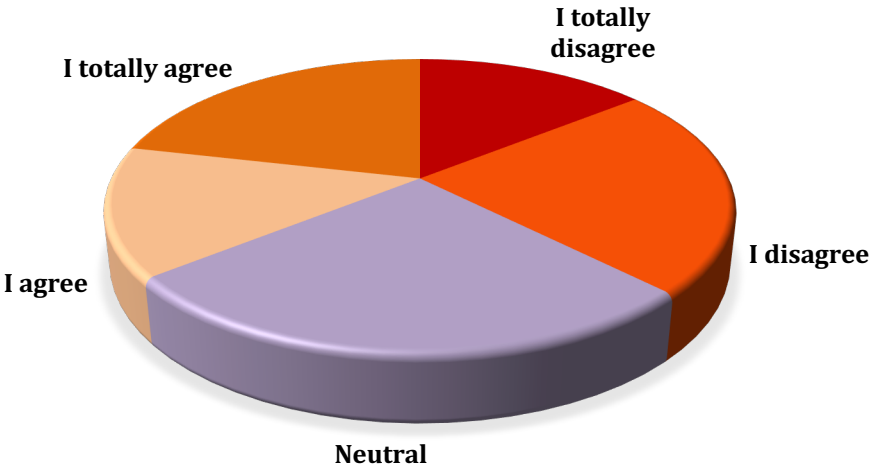


According to the students' responses, the majority of them are more motivated to learn and participate in lesson activities when teachers use innovative technology and games in the classroom. It is well known that they inspire learners to express their creativity and allow for the introduction of various learning styles into the curriculum.

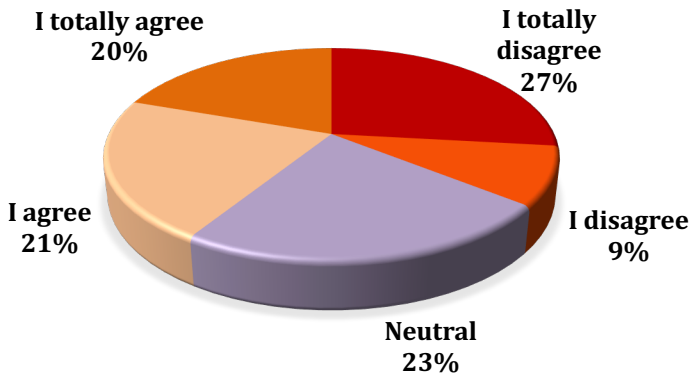
4. The teacher pays attention to other pupils instead of me.



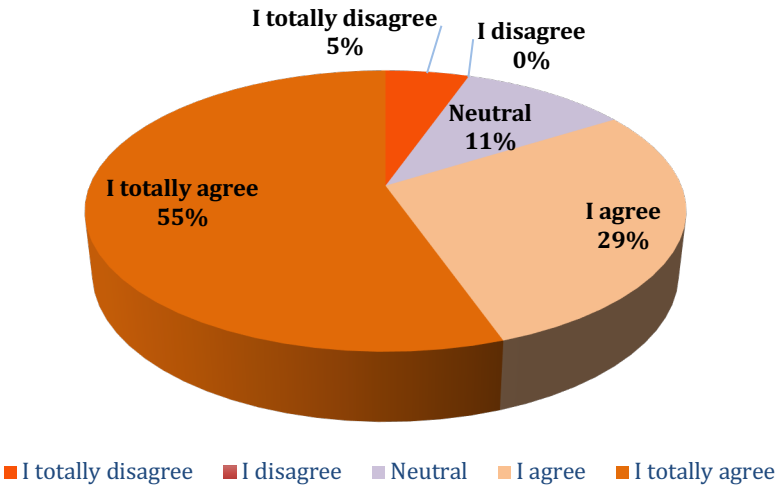
5. I get easily distracted thinking about my own things.



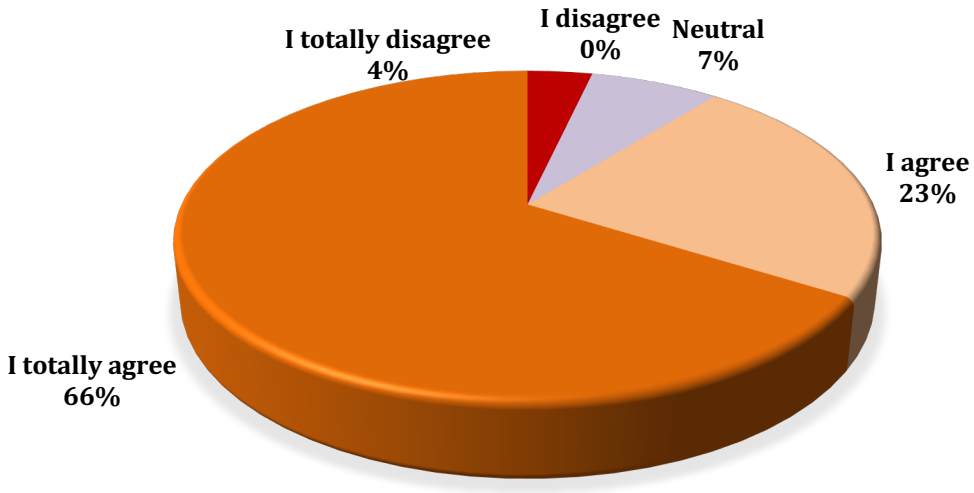
6. I study and complete my homework in the shortest possible time, even if it sometimes contains mistakes.



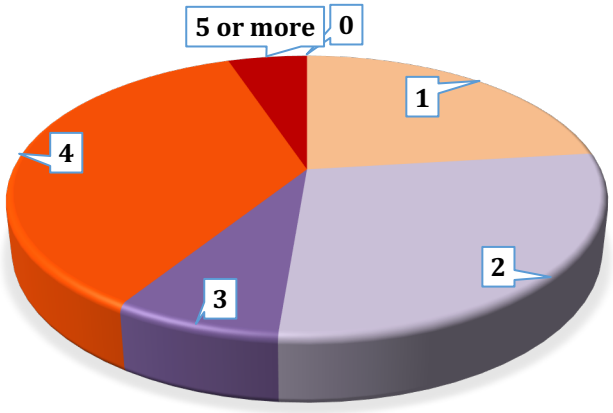
7. I am more motivated to study and learn when the teachers use some games with us.



8. My family helps me with my homework and studies.



9. Circle the number of children in your class with whom you never feel like playing.



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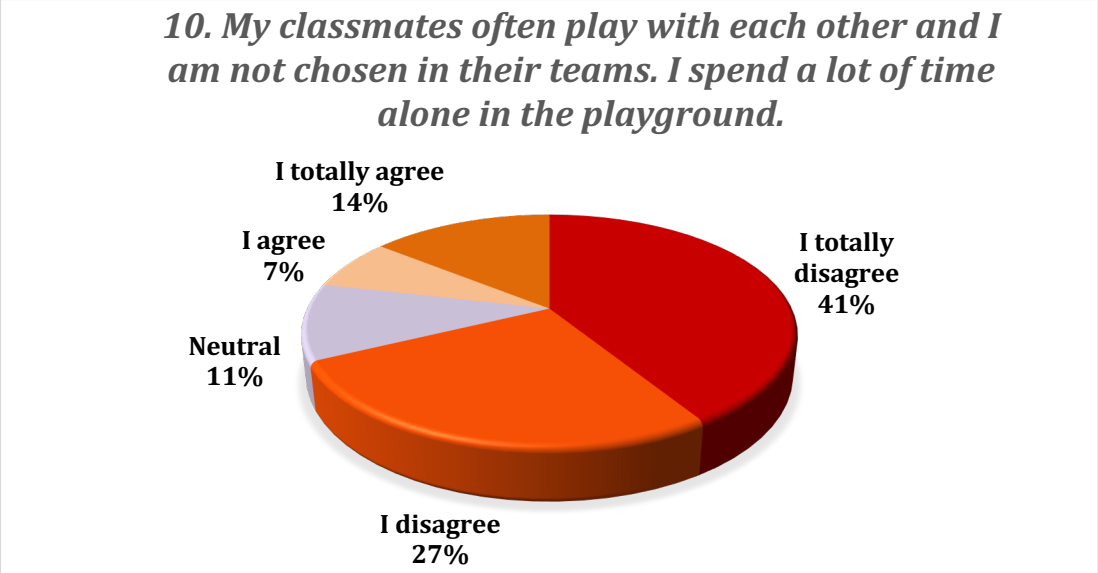
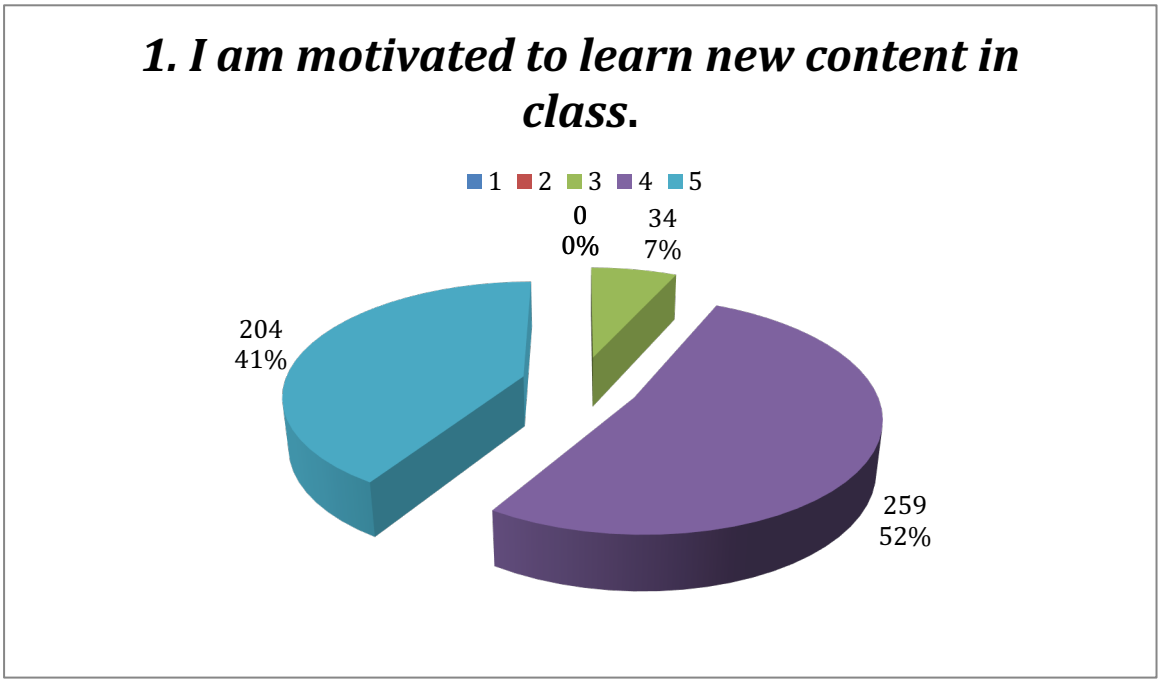
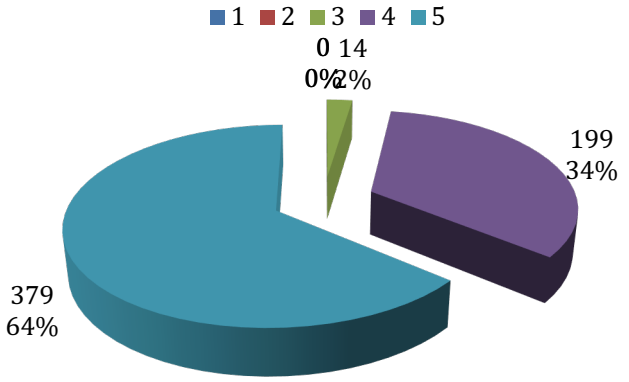


While reviewing the survey's results, it became evident that the utilization of the project's games and activities helped the pupils adapt to the school environment and established a friendly atmosphere, as they bonded the teachers with the pupils and the pupils with their classmates and promoted the acquisition of new skills.
Having taken everything into account, it is obvious that the implementation of the right techniques and methodologies can have a great impact on the learners and their school life.

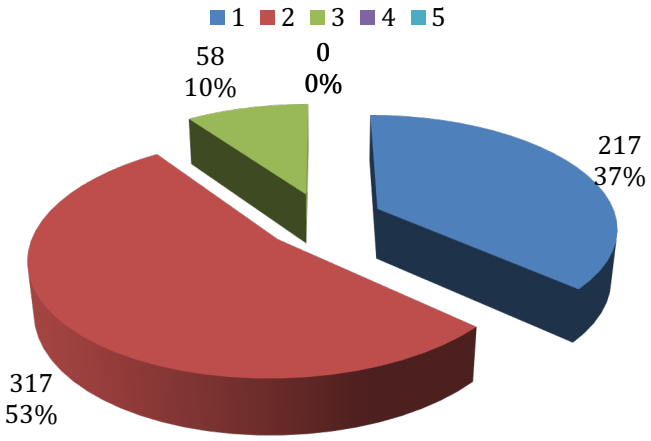
Romania



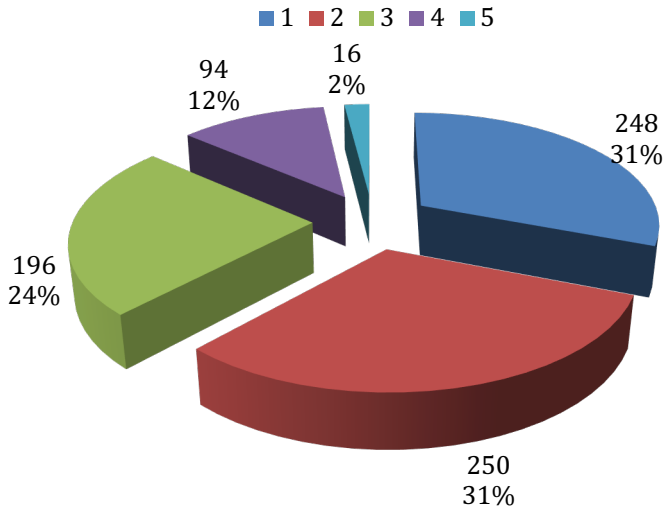
2. I am motivated by the use of new technologies in class (computer, interactive monitor, tablets, etc)



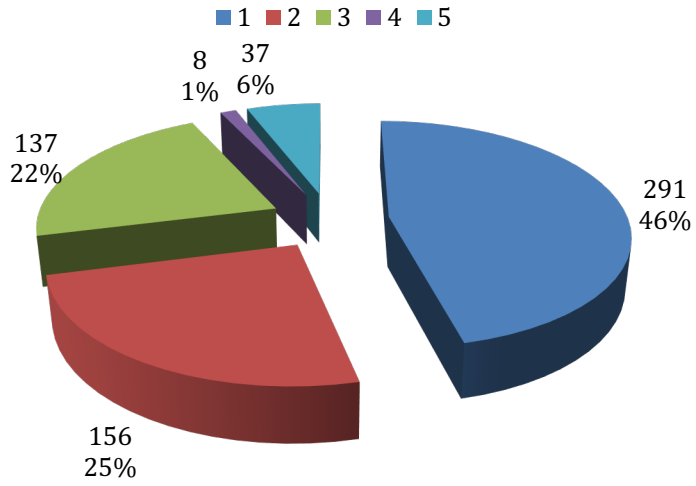
3. The lessons are less monotonous and boring if we play games.



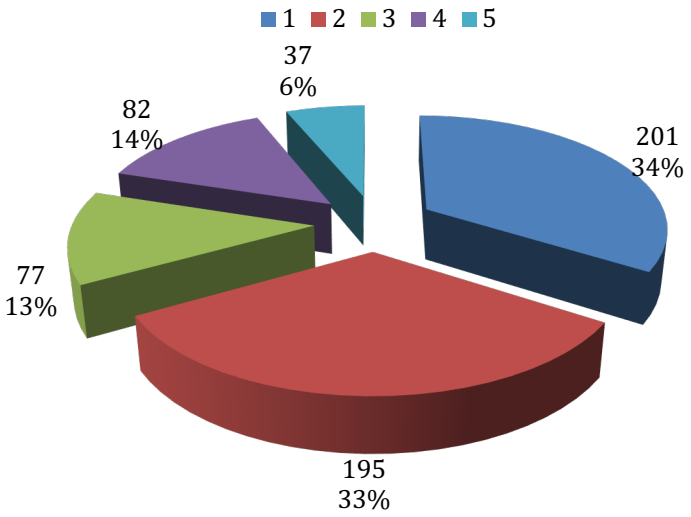
4. The teacher pays attention to other pupils instead of me.



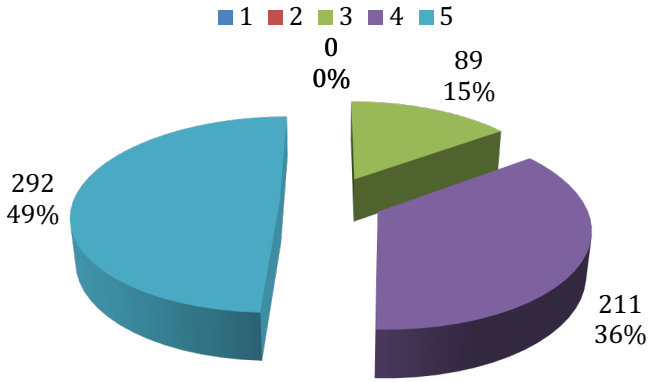
5. I get easily distracted thinking about my own things.



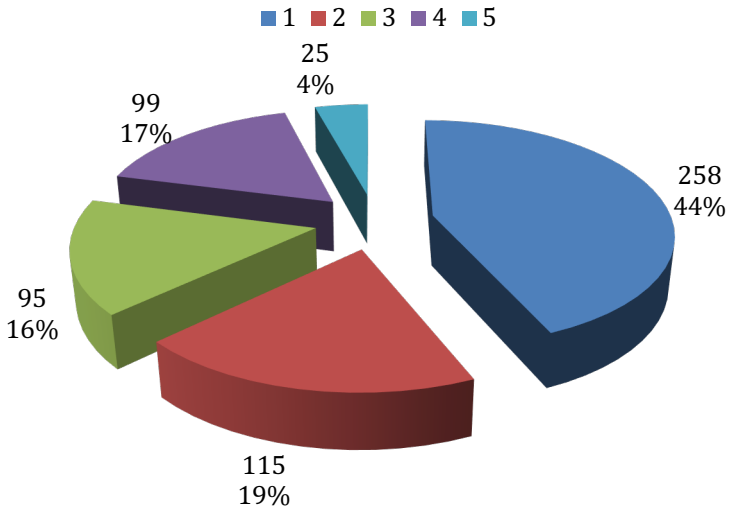
6. I STUDY AND COMPLETE MY HOMEWORK IN THE SHORTEST POSSIBLE TIME, EVEN IF IT SOMETIMES CONTAINS MISTAKES.



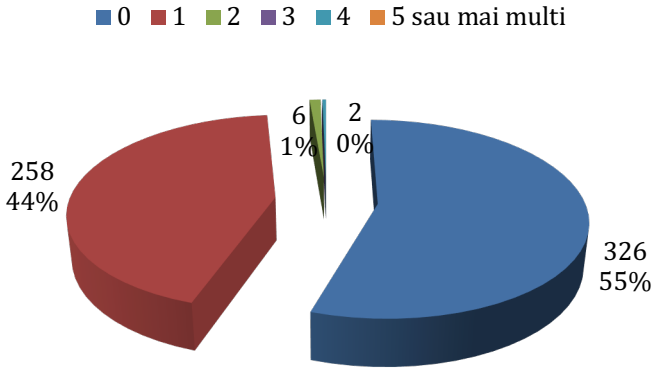
7. I am more motivated to study and learn when the teachers use some games with us.



8. My family helps me with my homework and studies.



9. Circle the number of children in your class with whom you never feel like playing.



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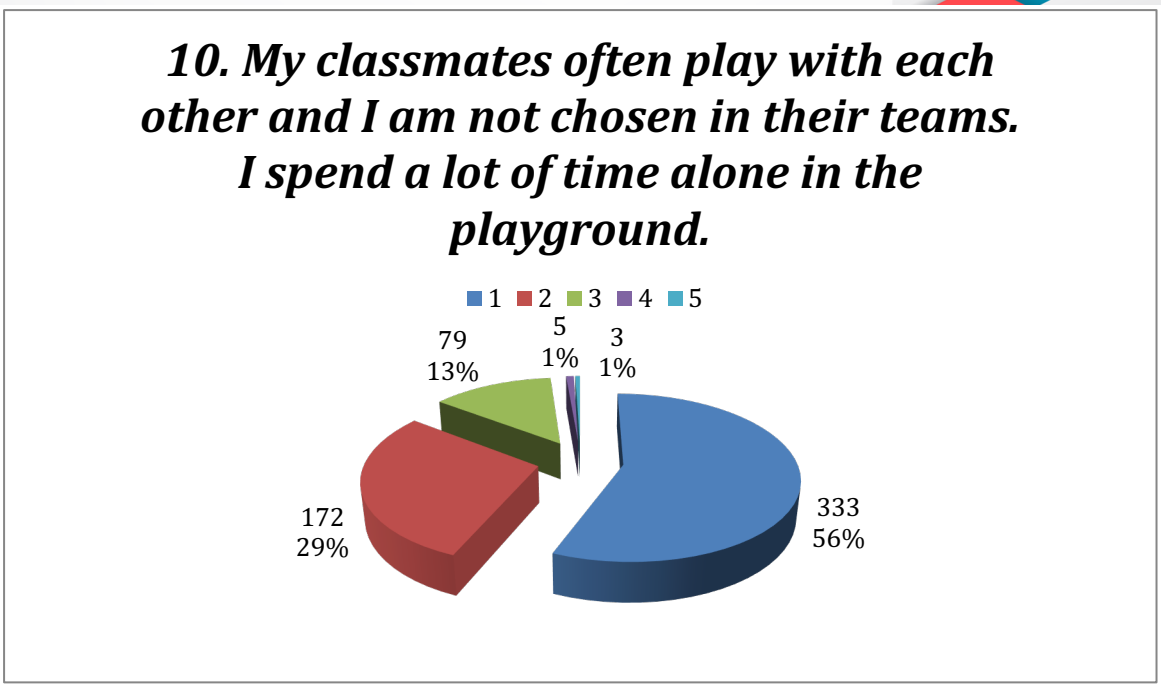

As already showed in the previous country also in Romania young students found really important the gamification/ GBL to motivate them too study, having better social relation and involve more the families in the school's life.

School Card analysis:

At the end of the piloting we asked each school that participated in the piloting to compare the School reports (or report cards) of the students involved in the gamification process related to the main signatures. This request was made to check also if the benefits of using a gamification inside a class bring benefits in signatures too.
In total has been analyzed 797 school report before applying the gamification, and 810 school report after the gamification.

COUNTRY	N. STUDENTS BEFORE GAMIFICATION	N. STUDENTS AFTER GAMIFICATION
SPAIN	149	162
ROMANIA	592	592
GREECE	56	56
TOTAL	797	810

BEFORE GAMIFICATION					
	Not passed		Passed		TOTAL
	Nº	**%**	**Nº**	**%**	**Nº**
	260	12	1904	88	2164

AFTER GAMIFICATION					
	Not passed		Passed		TOTAL
	Nº	**%**	**Nº**	**%**	**Nº**
	218	7	2751	93	2969

Before the gamification have been analyzed a total of 2164 signature, with 12% of failure from students' side.
After the gamification have been analyzed a total of 2969 signatue (due to the increased number of students), and the fail ratio get reduced to 7%, highlighting the success of the gamificaition strategy also on the academic level of the students.
After will be shown the country reports per each school who participated to the project.

SPAIN

The piloting started after the 2nd Evaluation of the year and used "Classdojo"(1st-2nd-3rd grade) and "Myclassgame" (5th-6th grade) as gamification system.
The school presented the student's school reports of 2nd (before gamification) , 3rd (during gamification) and 4th evaluation (after gamification).

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The signature used to evaluate are:
CN (Ciencias Naturales) - Natural Science
CS (Ciencias Sociales) - Social Science
LENGUA - Spanish (Native language)
MATEMATICA (Mates)- Mathematics
INGLES - English (foreign Language)

Insuf (Insuficiente): Not passed
Aprobados: Passed

2ª EVALUATION					
	Not passed		Passed		TOTAL
	Nº	%	Nº	%	Nº
	81	11	664	89	745

During the 2nd school report, we collected the reports of 149 students from 1st to 6th grade, corresponding to 745 signatures to analyze.
The starting situation before applying the gamification strategy inside the school showed that 11% of the signature were “Not Passed” by the students.

3ª EVALUATION					
	Not Passed		Passed		TOTAL
	Nº	%	Nº	%	Nº
	67	8	753	92	820

During the Gamification have been done the 3rd school report of the year, where were collected 164 (from 1st to 6th grade) students’ school report, and 820 signatures to analyze.
In this moment just the 8% of the signatures were resulting “not passed” showing already more interest and attention from pupils to classes.

EVALUATION FINAL 21/22					
	Not passed		Passed		TOTAL
	Nº	%	Nº	%	Nº
	74	9	736	91	810

After the Gamification have been collected, for the 4th ,and final report of the year, 162 students' school report, corresponding to 810 signatures to analyze.
The percentage of "NOT Passed" increased only by 1% compared to the previous school reports (the 3rd) and keep far from the first school report analyzed, where the percentage of NOT passed signature was the 11%.
This collected results show how the gamification strategy adopted inside the primary school in Spain was effective and the good impact it had on the students.

1st Grade:

Gamification system used: CLASSDOJO

Before Gamification

2ª EVALUACIÓN					
1ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	0	0	21	100	21
CS	0	0	21	100	21
LENGUA	3	14	18	86	21
MATES	2	10	19	90	21
INGLES	0	0	21	100	21

During Gamification

3ª EVALUACIÓN					
1ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	1	5	21	95	22
CS	1	5	21	95	22
LENGUA	4	18	18	82	22
MATES	3	14	19	86	22
INGLES	1	5	21	95	22

After Gamification

EVALUACIÓN FINAL 21/22					
1ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	1	5	21	95	22
CS	1	5	21	95	22
LENGUA	4	18	18	82	22
MATES	4	18	18	82	22
INGLES	1	5	21	95	22

2nd grade:

Gamification System used: Classdojo

Before Gamification

2ª EVALUACIÓN					
2ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	0	0	24	100	24
CS	1	4	23	96	24
LENGUA	4	17	20	83	24
MATES	1	4	23	96	24
INGLES	1	4	23	96	24

During Gamification

After Gamification

3ª EVALUACIÓN					
2ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	0	0	24	100	24
CS	0	0	24	100	24
LENGUA	3	13	21	88	24
MATES	1	4	23	96	24
INGLES	1	4	23	96	24

EVALUACIÓN FINAL 21/22					
2ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	0	0	22	100	22
CS	0	0	22	100	22
LENGUA	3	14	19	86	22
MATES	1	5	21	95	22
INGLES	1	5	21	95	22

3rd Grade:

Gamification System used: Myclassgame (No narrative, only avatars)

Before Gamification

2ª EVALUACIÓN					
3ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	1	5	20	95	21
CS	4	19	17	81	21
LENGUA	2	10	19	90	21
MATES	2	10	19	90	21
INGLES	1	5	20	95	21

During Gamification

3ª EVALUACIÓN					
3ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	1	5	21	95	22
CS	3	14	19	86	22
LENGUA	1	5	21	95	22
MATES	1	5	21	95	22
INGLES	1	5	21	95	22

After Gamification

EVALUACIÓN FINAL 21/22					
3ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	1	5	21	95	22
CS	3	14	19	86	22
LENGUA	2	9	20	91	22
MATES	2	9	20	91	22
INGLES	1	5	21	95	22

4th Grade:

Gamification system used: Myclassgame - (Narrative with audiobook)

Before Gamification

2ª EVALUACIÓN					
4ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	3	13	20	87	23
CS	3	13	20	87	23
LENGUA	4	17	19	83	23
MATES	5	22	18	78	23
INGLES	2	9	21	91	23

During Gamification

After Gamification

3ª EVALUACIÓN					
4ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	2	8	22	92	24
CS	0	0	24	100	24
LENGUA	4	17	20	83	24
MATES	4	17	20	83	24
INGLES	1	4	23	96	24

EVALUACIÓN FINAL 21/22					
4ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	2	8	22	92	24
CS	2	8	22	92	24
LENGUA	4	17	20	83	24
MATES	4	17	20	83	24
INGLES	2	8	22	92	24

5th Grade:

In the 5th grade 2 different classes implemented the “Gamiright” activity.

Gamification system used: Myclassgame (narrative with audiobook)

Before Gamification

2ª EVALUACIÓN					
5ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	1	6	17	94	18
CS	0	0	18	100	18
LENGUA	5	28	13	72	18
MATES	2	11	16	89	18
INGLES	4	22	14	78	18

During Gamification

After Gamification

3ª EVALUACIÓN					
5ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	0	0	24	100	24
CS	1	4	23	96	24
LENGUA	4	17	20	83	24
MATES	2	8	22	92	24
INGLES	2	8	22	92	24

EVALUACIÓN FINAL 21/22					
5ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	1	4	23	96	24
CS	1	4	23	96	24
LENGUA	4	17	20	83	24
MATES	1	4	23	96	24
INGLES	2	8	22	92	24

The second class of 5th grade that implemented the gamification system:

Before Gamification

2ª EVALUACIÓN					
5ºB	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	2	11	16	89	18
CS	3	17	15	83	18
LENGUA	2	11	16	89	18
MATES	2	11	16	89	18
INGLES	3	17	15	83	18

During gamification

After Gamification

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3ª EVALUACIÓN					
5ºB	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	2	8	22	92	24
CS	2	8	22	92	24
LENGUA	2	8	22	92	24
MATES	2	8	22	92	24
INGLES	2	8	22	92	24

EVALUACIÓN FINAL 21/22					
5ºB	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	2	8	22	92	24
CS	2	8	22	92	24
LENGUA	2	8	22	92	24
MATES	2	8	22	92	24
INGLES	2	8	22	92	24

6th grade:

Gamification system: Myclassgame (Readed Narrative)

Before Gamification

2ª EVALUACIÓN					
6ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	2	8	22	92	24
CS	4	17	20	83	24
LENGUA	5	21	19	79	24
MATES	4	17	20	83	24
INGLES	3	13	21	88	24

During Gamification

3ª EVALUACIÓN					
6ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	1	4	23	96	24
CS	3	13	21	88	24
LENGUA	4	17	20	83	24
MATES	4	17	20	83	24
INGLES	3	13	21	88	24

After Gamification

EVALUACIÓN FINAL 21/22					
6ºA	INSUFIC.		APROBADOS		TOTAL
ASIGNATURA	Nº	%	Nº	%	Nº
CN	1	4	23	96	24
CS	4	17	20	83	24
LENGUA	4	17	20	83	24
MATES	4	17	20	83	24
INGLES	3	13	21	88	24

CONCLUSION: In general, during the piloting in spain, it is noticeable that grades in all classes improved, and there were more pass marks since the introduction of gamification within the classes and then remained so until the end of piloting.

ROMANIA

In ROMANIA, there were 2 assessments carried out as report cards are administered every six months. The subjects selected are:

Romanian - (Native language)
Mathemathics
English
French
History
Biology

Gamification system: Class Dojo

A total of 592 students were analyze during this piloting.

As not all of them had signatures in common, except for the Romanian language, in the following tables the total per each signature will be different from the others.

Before Gamification

1st EVALUATION - 1st semester (before Gamification)					
Class	NOT PASSED		PASSED		TOTAL
Subject	**Nº**	**%**	**Nº**	**%**	**Nº**
Romanian Language	48	8	544	92	592
Math	77	18	346	82	423
English	19	6	319	94	338
French	19	7	235	93	254
History	8	6	133	94	141
Biology	8	10	72	90	80

After Gamification

FINAL EVALUATION					
Class	NOT PASSED		PASSED		TOTAL
Subject	**Nº**	**%**	**Nº**	**%**	**Nº**
Romanian Language	39	7	553	93	592
Math	58	14	365	86	423
English	17	5	321	95	338
French	19	7	235	93	254
History	7	5	134	95	141
Biology	4	5	76	95	80

CONCLUSION: based on the data collected the benefits of the project are showed by the marks of the students where, after the gamification, approved more signatures increasing the % of “PASSED” in every signature.

GREECE

Before Gamification

1ª EVALUATION					
3rd-4th-5th Class	NOT PASSED		PASSED		TOTAL
Subject	**Nº**	**%**	**Nº**	**%**	**Nº**
Greek Language	0	0	56	100	56
Maths	0	0	56	100	56
History	0	0	56	100	56
Science	0	0	56	100	56
English	0	0	56	100	56

After Gamification

2ª EVALUATION					
3rd-4th-5th Class	NOT PASSED		PASSED		TOTAL
Subject	**Nº**	**%**	**Nº**	**%**	**Nº**
Greek Language	0	0	56	100	56
Maths	0	0	56	100	56
History	0	0	56	100	56
Science	0	0	56	100	56
English	0	0	56	100	56

Officially, the school dropout rate in Greece is very low (3.8%), but this is not because our students enjoy school so much that they don't leave; rather, this is due to the Ministry of Education's policy. They believe that if a student repeats the same class, he will not improve the following year. For this reason analyze the school

report per students in Greece can't be usefull for the purpose of our research as the school system is letting pass every students.
There is a small proportion (3.8%) consists mainly of Roma students who attend specific schools. These children are brought to school by their parents as there is an EU program which provides them with an allowance in this circumstance. However, once they receive the allowance, they quit school.

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